

SERVICE  
MANUAL

# PM54II/PM64II

**marantz®**

model PM-54II/PM-64II

*Stereo Amplifier*

## MARANTZ DESIGN AND SERVICE

Using superior design and selected high grade components, MARANTZ company has created the ultimate in stereo sound.

Only **original MARANTZ parts** can insure that your MARANTZ product will continue to perform to the specifications for which it is famous.

Parts for your MARANTZ equipment are generally available to our National Marantz Subsidiary or Agent.

### ORDERING PARTS:

Parts can be ordered either by mail or by telex. In both cases, correct part number has to be specified.

The following information must be supplied to eliminate delays in processing your order:

1. Complete address
2. Complete part numbers and quantities required
3. Description of parts
4. Model number for which part is required
5. Way of shipment
6. Signature: any order form or telex must be signed otherwise such part order will be considered as null and void.

### PARTS ORDERING

Parts may be ordered at the following addresses:

#### AUSTRIA

HORNYPHON  
Vertriebsgesellschaft GmbH  
Wienerbergstrasse 1  
A 1101 Wien  
Austria  
Telex: 132.332

#### AUSTRALIA

MARANTZ AUSTRALIA  
PTY., Ltd.  
19 Chard Road  
Brookvale, NSW 2100  
Australia  
Telex: 24121

#### BELGIUM

SVD DIVISION MARANTZ  
Industrialaan 1  
1720 Groot-Bijgaarden  
Belgium  
Telex: 24466

#### CHILE

MARANTZ  
DIVISION OF PHILIPS S.A.  
AV. Santa Maria, 0760  
Casilla 2687  
Santiago  
Telex: 240.239

#### DENMARK

MARANTZ  
DIVISION OF PHILIPS  
SERVICE A/S  
Prags Boulevard 80  
Postbox 1919  
DK-2300 København S  
Denmark  
Telex: 31201

#### FINLAND

MARANTZ  
DIVISION OF OY PHILIPS Ab  
Kaivokatu 8  
00100 Helsinki  
Finland  
Telex: 124811

#### FRANCE

MARANTZ FRANCE  
4 Rue Bernard Palissy  
92600 Asnières  
France  
Telex: 611651

#### GERMANY

MARANTZ GERMANY GmbH  
Max-Planck-Strasse 22  
6072 Dreieich 1  
Germany  
Telex: 529821

#### THE NETHERLANDS

Elpro b.v.  
De Limiet 3  
4131 NR Vianen  
The Netherlands  
Telex: 47679

#### NORWAY

MARANTZ  
DIVISION OF PHILIPS A/S  
Sandstuveien 40  
Oslo 6  
Norway  
Telex: 72640

#### GREAT BRITAIN

MARANTZ AUDIO U.K. Ltd  
Unit 15/16  
Saxon Way Industrial Estate  
Moor Lane  
Harmondsworth UB7 0LW  
Great Britain  
Telex: 935196

#### GREECE

SHERTON ELECTRONICS S.A.  
P.O.Box 21025  
Hippocratus Street 188  
Athens 11471  
Greece  
Telex: 216.795

#### JAPAN

MARANTZ JAPAN, Inc.  
35-1, 7-chome, Sagamiono  
Sagamihara-shi, Kanagawa  
Japan

#### KUWAIT

AL ALAMIAH ELECTRONICS  
Ussama Building  
Fahd al Saleem Street  
P.O.Box 23781  
Safat-Kuwait  
Telex: 22694

#### ITALY

MARANTZ ITALIANA S.P.A.  
Via Chiese, 74  
20126 Milano  
Italy

#### SAUDI ARABIA

AL ALAMIAH ELECTRONICS  
P.O.Box 5954  
University Street  
Riyadh 11432  
Saudi Arabia  
Telex: 201530

#### SOUTH AFRICA

MARANTZ  
DIVISION OF PHILIPS S.A.  
Rainer House  
Ove Street, 10  
Doornfontein  
Johannesburg  
Telex: 483.456

#### SPAIN

PHONO S.A.  
Ignacio Iglesias 10  
Badalona (Barcelona)  
Spain  
Telex: 59355

#### SWEDEN

MARANTZ  
DIVISION OF PHILIPS  
Försäljning AB  
Tegeluddsvägen 1  
S-115 84 Stockholm  
Sweden  
Telex: 14060

#### SWITZERLAND

DYNAVOX ELECTRONICS  
Route de Villars 105  
1701 Fribourg  
Switzerland  
Telex: 942377

#### TURKEY

DOGRUOL Ltd.  
I.M.C.  
6 Blok N°6310  
Unkapani  
Istanbul  
Turkey  
Telex: 22085

#### MALTA

CACHIA & GALEA  
Republic Street, 68D  
Valetta  
Telex: 1682

#### U.S.A.

MARANTZ COMPANY, Inc.  
National Service Department  
P.O.Box 577  
Chatsworth, CA 91311  
U.S.A.

### TECHNICAL ASSISTANCE

Should you require any other technical support, do not hesitate to contact the Technical Department of MARANTZ INTERNATIONAL

Quality & Service Dept.

80, Rue des Deux Gares,

B-1070 Brussels

Belgium

Phone: 02/525.70.22 or 525.70.23

Telefax: 02/525.6160

Telex: 23550 OR

61511 (PHEMB) routing: BELDMZT

**All of the above locations are fully equipped to take care of your total service needs. Because various countries have differing configuration requirements, it is necessary that you contact the service facility in your particular country. In the event that there is no service location listed for your country, please, contact the nearest facility for the necessary assistance.**

In case of difficulties, do not hesitate to contact the Technical Department at abovementioned address.

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### How to use this service manual

- The "Common parts" which Marantz Japan, Inc. has established are eliminated from this service manual.
- These "Common parts" are applied to all models in the service manuals arranged and issued by MJI.
- To indicate clearly the common parts in the schematic diagram, a line is drawn above or under the Ref. Desig. No. of applicable parts.
- "Common parts" can be supplied from the Marantz service center as ever.  
In case of ordering, please establish the parts number of 10 figures following the procedure mentioned in this service manual "How to establish the parts number for common parts".

#### (NOTE)

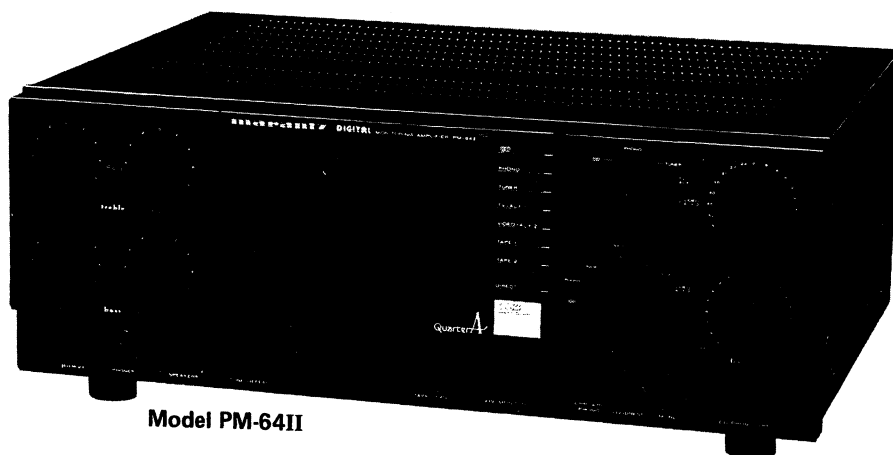
When you order parts to the Marantz parts center, please take notice of the following points.

- 1) Please correctly write the parts number of 10 figures following the rule.
- 2) Since ordering parts by the Ref. Desig. No. or ratings indicated in the schematic diagram does not satisfy the above conditions, the Marantz parts supply system does not work properly.  
As this case is apt to cause a trouble, please pay attention to it.

## MODEL PM-54II/PM-64II STEREO AMPLIFIER



Model PM-54II



Model PM-64II

### INTRODUCTION

This service manual was prepared for use by Authorized Warranty Stations and contains service information for the Marantz Model PM-54II/PM-64II Stereo Amplifier.

Servicing information and voltage data included in this manual are intended for use by knowledgeable and experienced personnel only. All instructions should be read carefully. No attempt should be made to proceed without a good understanding of circuitry operation.

The parts list furnishes complete ordering information. Most replacement parts should be ordered from the Marantz Company. However, a simple description is included for parts which can be obtained locally.

### 1. P.W. BOARDS

As can be seen from the circuit diagram the chassis of Model PM-54II/PM-64II consists of the following units. Each unit mounted on a printed circuit board is described within the square enclosed by a bold dotted line on the circuit diagram.

#### (Model PM-54II)

1. Tone Volume . . . . . mounted on P.W. Board PE01
2. Tone Defeat Switch . . . . . mounted on P.W. Board PE51
3. Balance Volume . . . . . mounted on P.W. Board PG51
4. Tape Monitor . . . . . mounted on P.W. Board PJ01
5. Volume &  
Push Switch . . . . . mounted on P.W. Board PS01
6. AVSS . . . . . mounted on P.W. Board PU01
7. Phono,  
Input Selector . . . . . mounted on P.W. Board PV01
8. Speaker Protector . . . . . mounted on P.W. Board PW01
9. Speaker Switch &  
Phone . . . . . mounted on P.W. Board PW51
10. Input Selector  
Display . . . . . mounted on P.W. Board PY01
11. Main Amp . . . . . mounted on P.W. Board P701
12. Power Supply (Sub) . . . . . mounted on P.W. Board P801
13. Power Supply . . . . . mounted on P.W. Board P851
14. Power Switch . . . . . mounted on P.W. Board P901



## 2. TEST EQUIPMENT REQUIRED FOR SERVICING

This table lists the test equipment required for servicing the Model PM-54II/PM-64II Stereo Amplifier.

Item	Use
Distortion Analyzer	Distortion measurements
Audio Oscillator	Sinewave and squarewave signal source
AC VTVM	Voltage measurements (AC)
Oscilloscope	Waveform analysis and trouble shooting and ASO alignment
Circuit Tester	Trouble shooting
DC VTVM	Voltage measurements (DC)
AC Wattmeter	Monitors primary power to amplifier
Line Voltmeter	Monitors potential of primary power to amplifier
Variable Autotransformer (0 ~ 140V AC, 10A)	Adjust level of primary power to amplifier
Shorting Plug	Shorts amplifier input to eliminate noise pickup

## 3. ADJUSTMENT PROCEDURE

### 3.1 Idling Adjustment (Model PM-54II)

1. Connect DC digital voltage to test point R737 (L-CH) and R738 (R-CH) terminals.
2. Turn POWER SWITCH to ON, and adjust R719 (L-CH) and R720 (R-CH) to 6mV 30 sec. later, and to 7.5mV 1 min. later.

#### Note:

When adjusting, have output with no load, input to open, and volume on minimum.

### 3.2 Idling Adjustment (Model PM-64II)

1. Short-circuit the two pins in the AVSS board (PU01) marked CLASS A and CLASS B.
2. Adjust the main board (P701) semi-fixed resistors R719 and R720 so that the voltage between the ends of the emitter resistor is within 14 to 15 mA.
3. Immediately remove the short and adjust semi-fixed resistors RU35 and RU36 for a voltage of 100 mV between the ends of the emitter resistor. (Do this in the shortest time possible.)
4. Short-circuit the two pins in the AVSS board (PU01) marked CLASS A-25W.
5. Adjust semi-fixed resistors RU33 and RU34 for a voltage of 174 mV between the ends of the emitter resistor.
6. Finally, remove the short.

#### (Model PM-64II)

1. Tone Volume (L) . . . mounted on P.W. Board PE01
2. Tone Volume (R) . . . mounted on P.W. Board PE02
3. Tone Unit . . . . . mounted on P.W. Board PE50
4. Tone Defeat Switch . mounted on P.W. Board PE51
5. Tape Monitor . . . . . mounted on P.W. Board PJ01
6. Volume/Push Switch . mounted on P.W. Board PS01
7. Master Volume . . . . mounted on P.W. Board PS02
8. AVSS . . . . . mounted on P.W. Board PU01
9. Phono Input Selector . mounted on P.W. Board PV01
10. Speaker Protector  
Relay . . . . . mounted on P.W. Board PW01
11. Speaker Switch/  
Phone . . . . . mounted on P.W. Board PW51
12. Input Selector  
Display . . . . . mounted on P.W. Board PY01
13. Main Amp . . . . . mounted on P.W. Board P701
14. Diode Bridge . . . . . mounted on P.W. Board P801
15. Power Supply . . . . . mounted on P.W. Board P851

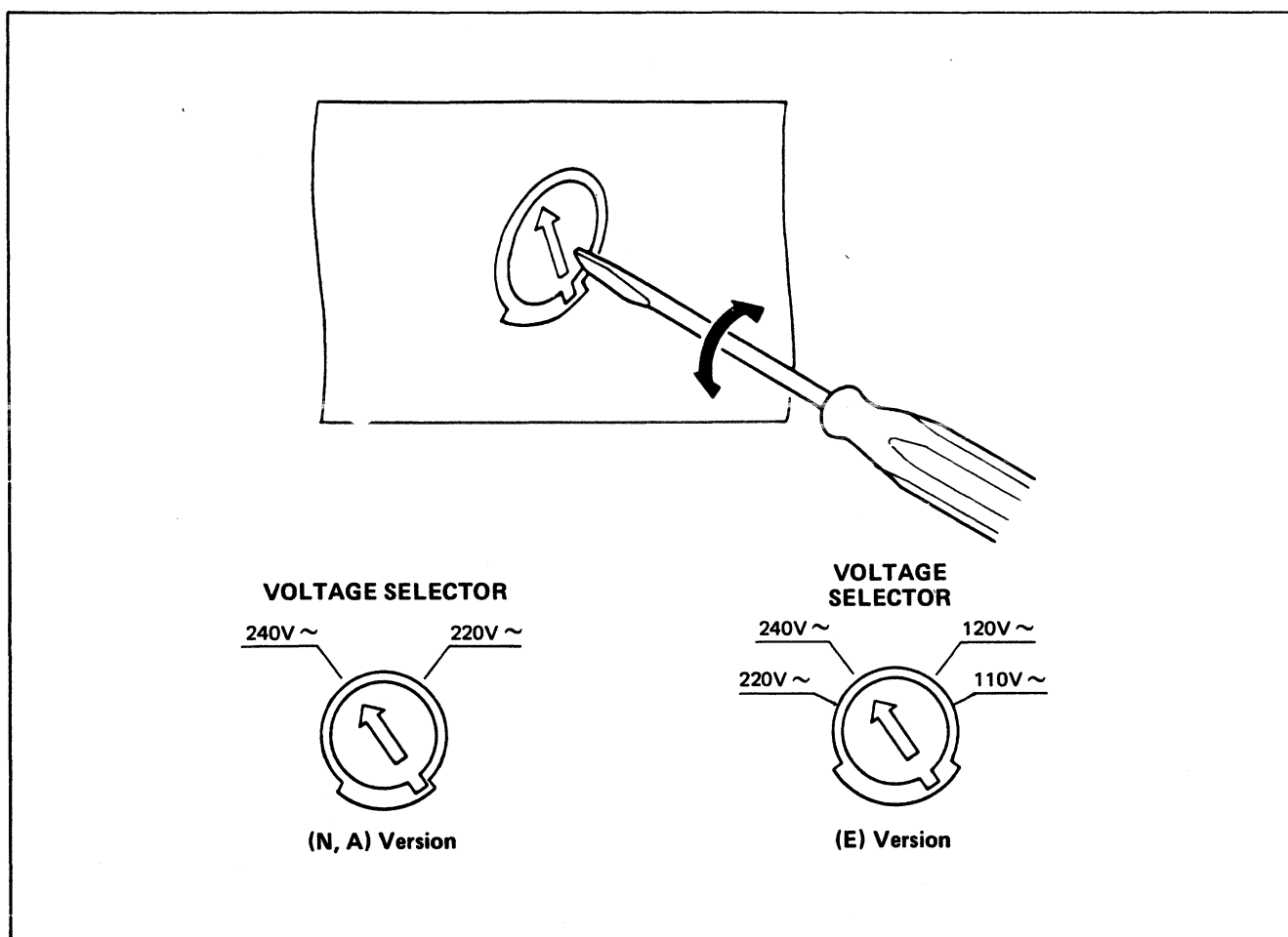
## 4. VOLTAGE CONVERSION

### • EUROPEAN MODEL ONLY

To convert the unit to a different power source voltage, change the position as illustrated in the drawing below.

**CAUTION**  
DISCONNECT POWER SUPPLY CORD FROM AC OUTLET BEFORE CONVERTING VOLTAGE.

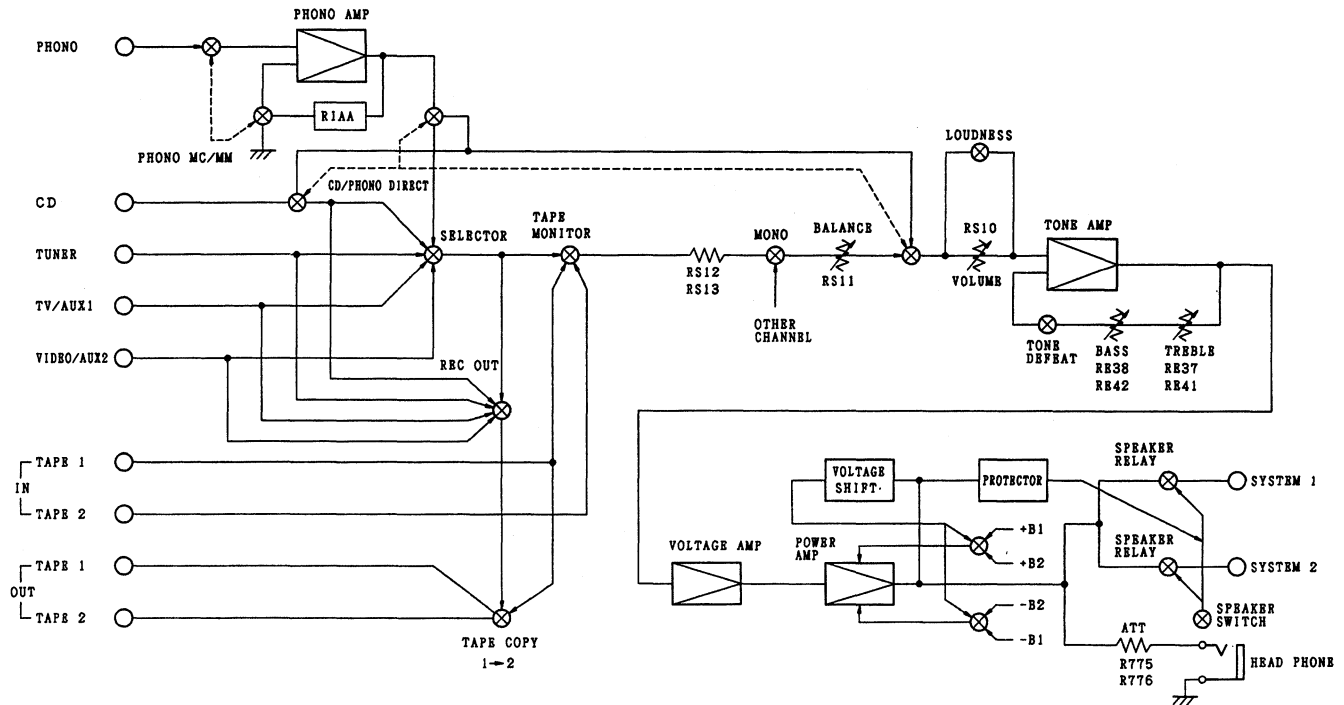
Voltage Conversion Chart



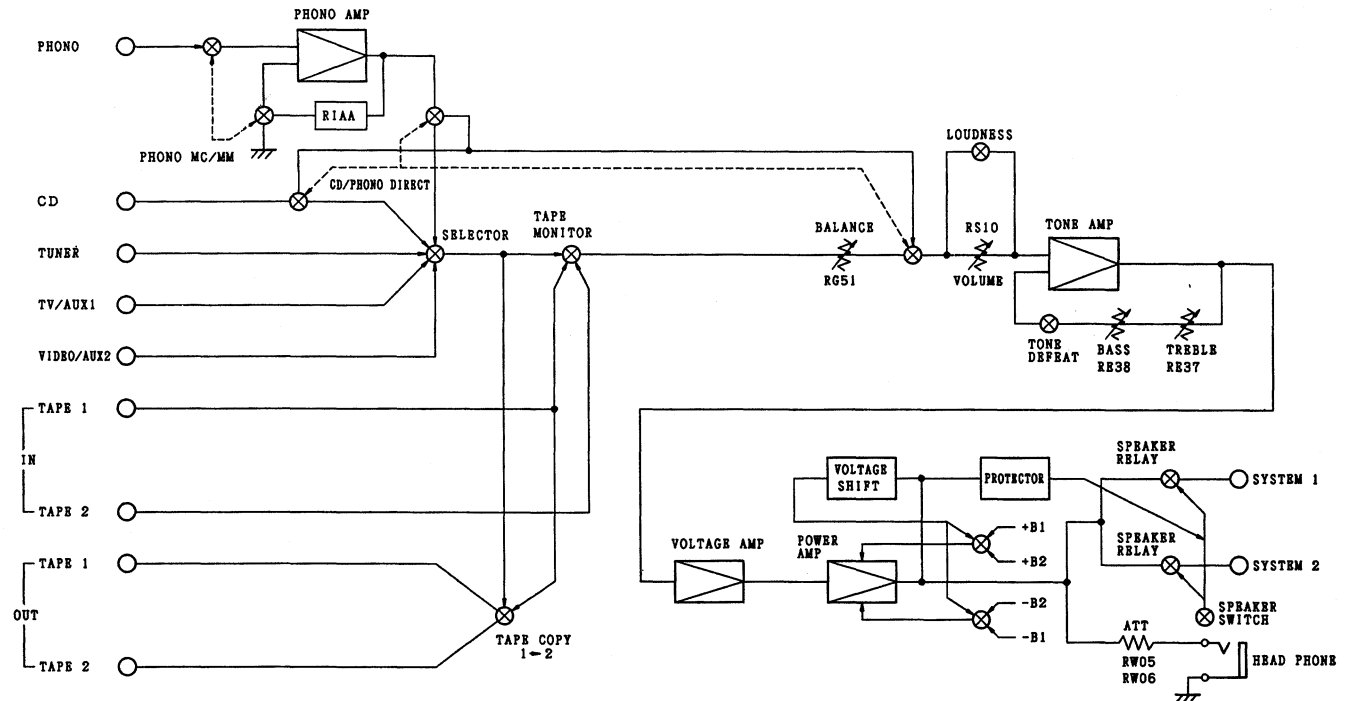
**Note on safety:** Symbol  $\triangle$  Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol  $\triangle$ . Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

## 5. BLOCK DIAGRAM

(Model PM-64II)

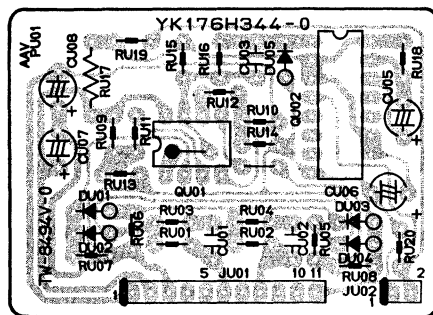
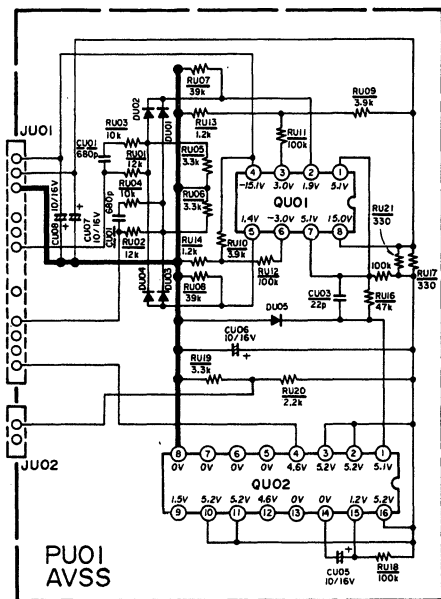


(Model PM-54II)

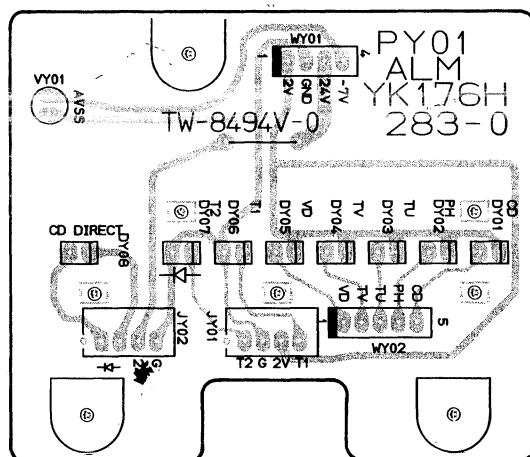
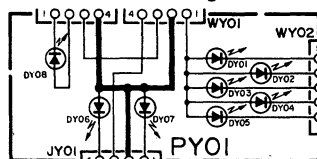


## 6. SCHEMATIC DIAGRAM AND COMPONENT LOCATIONS

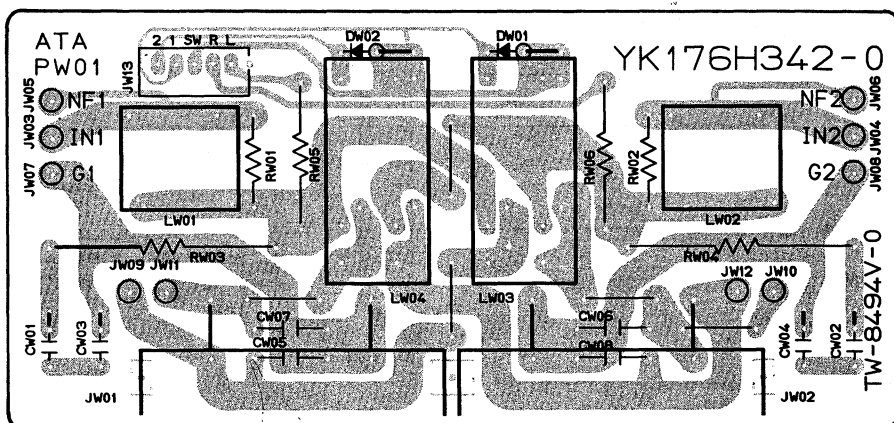
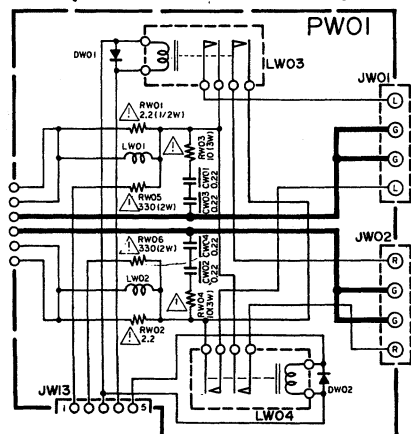
### 6.1 AVSS Assembly (PU01) Schematic Diagram and Component Locations (Model PM-54II)



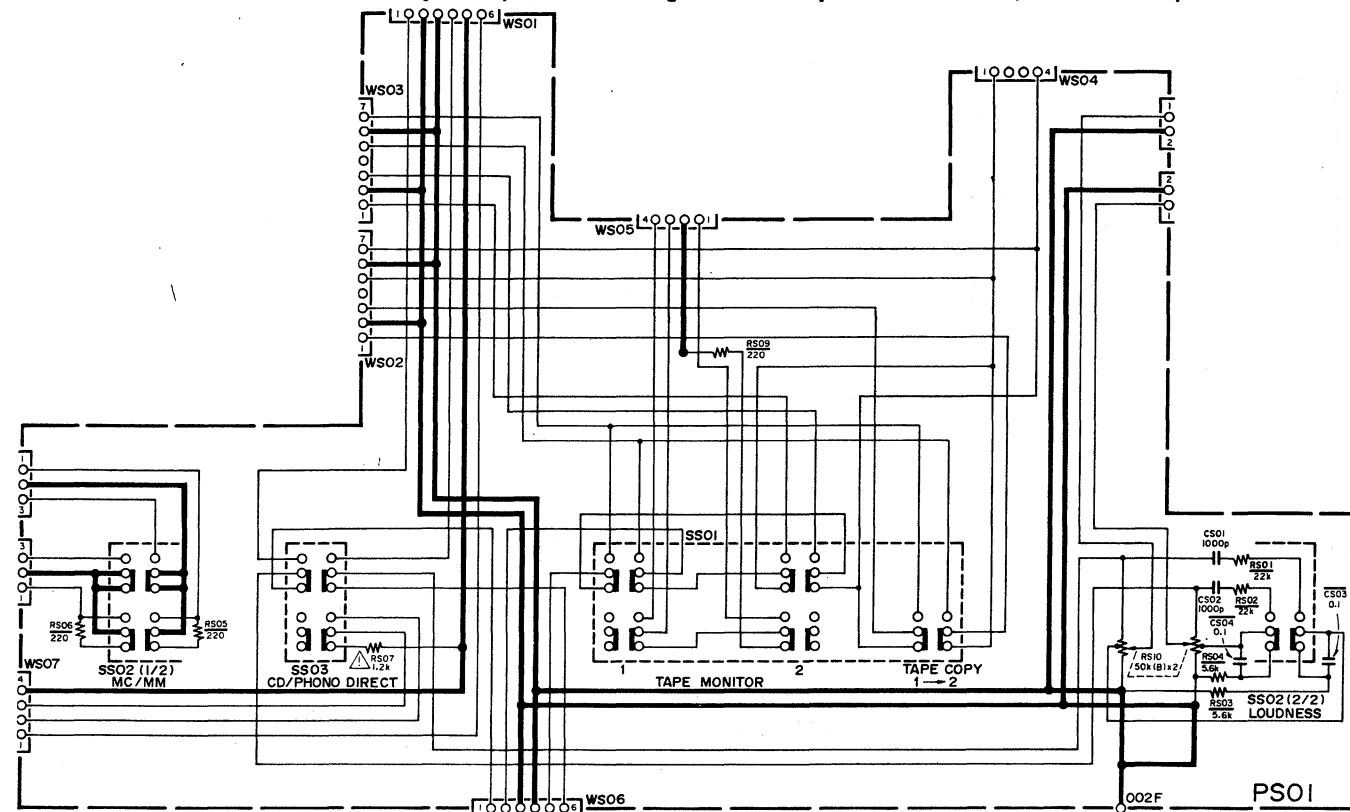
### 6.2 Input Selector Display Assembly (PY01) Schematic Diagram and Component Locations (Model PM-54II)



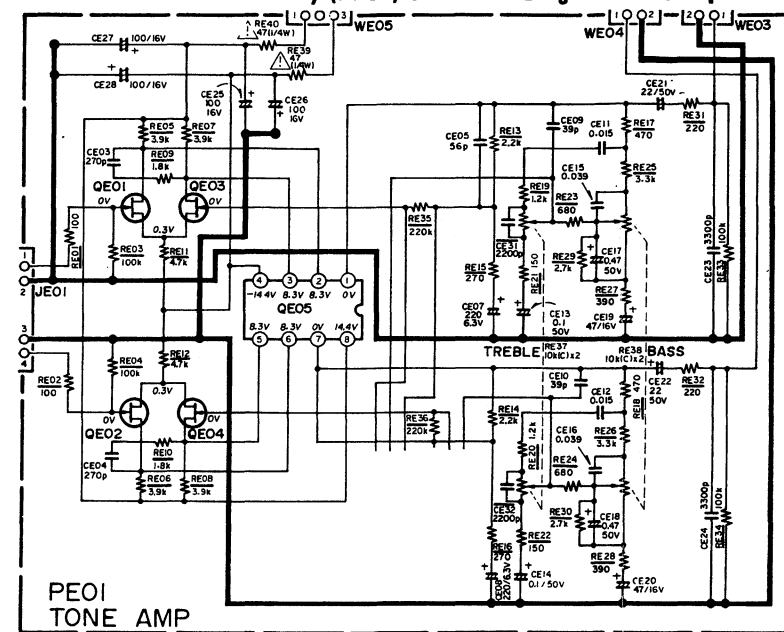
### 6.3 Speaker Protector Assembly (PW01) Schematic Diagram and Component Locations (Model PM-54II)



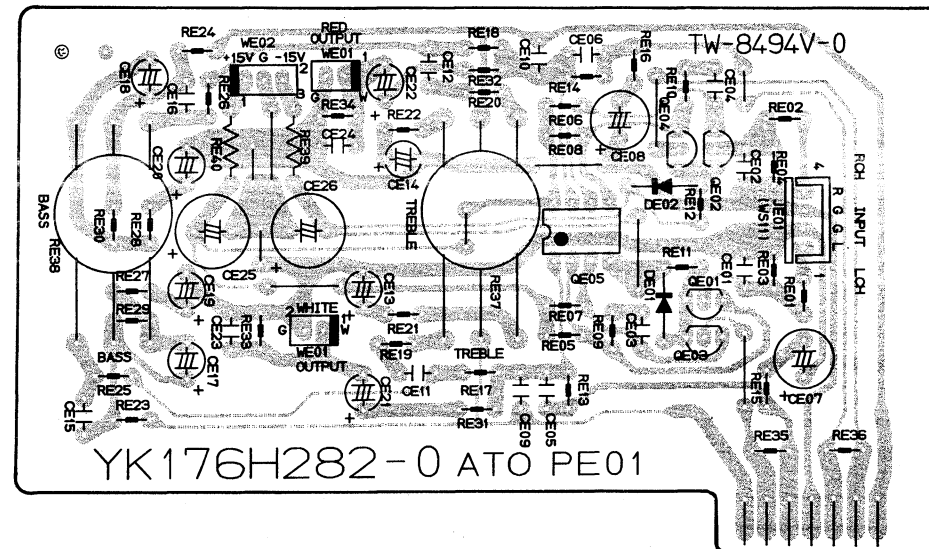
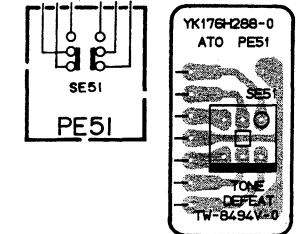
6.4 Volume & Push Switch Assembly (PS01) Schematic Diagram and Component Locations (Model PM-54II)



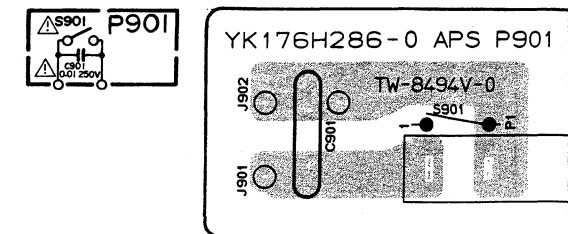
6.5 Tone Volume Assembly (PE01) Schematic Diagram and Component Locations (Model PM-54II)



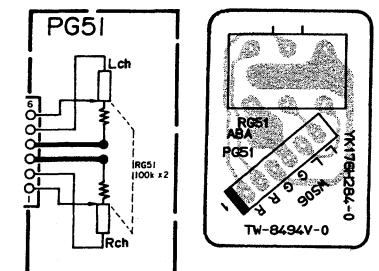
6.6 Tone Defeat Switch Assembly (PE51) Schematic Diagram and Component Locations (Model PM-54II)



6.7 Power Switch Assembly (P901) Schematic Diagram and Component Locations (Model PM-54II)



6.8 Balance Volume Assembly (PG51) Schematic Diagram and Component Locations (Model PM-54II)

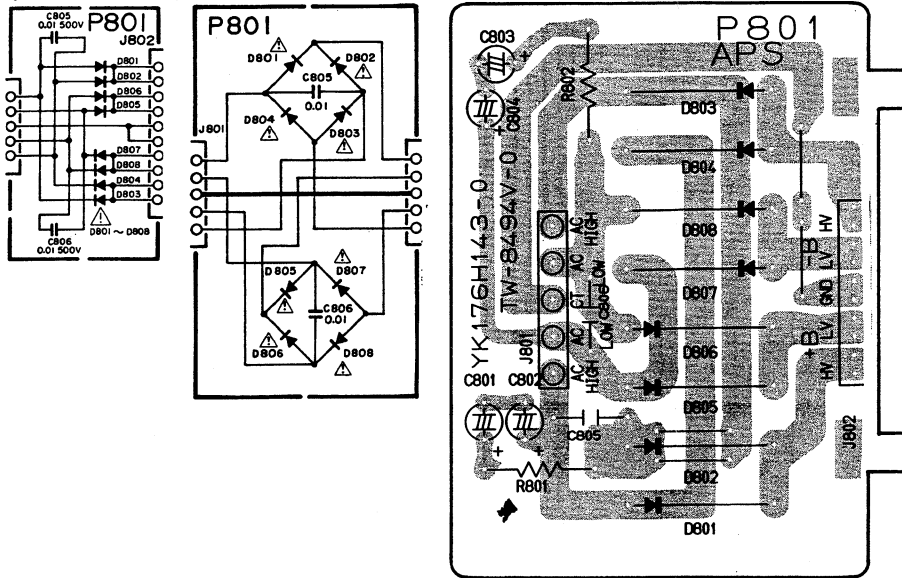


## 6.9 Diode Bridge Assembly (P801)

### Schematic Diagram and Component Locations

**(Model PM-54II)**

**(Model PM-64II)**

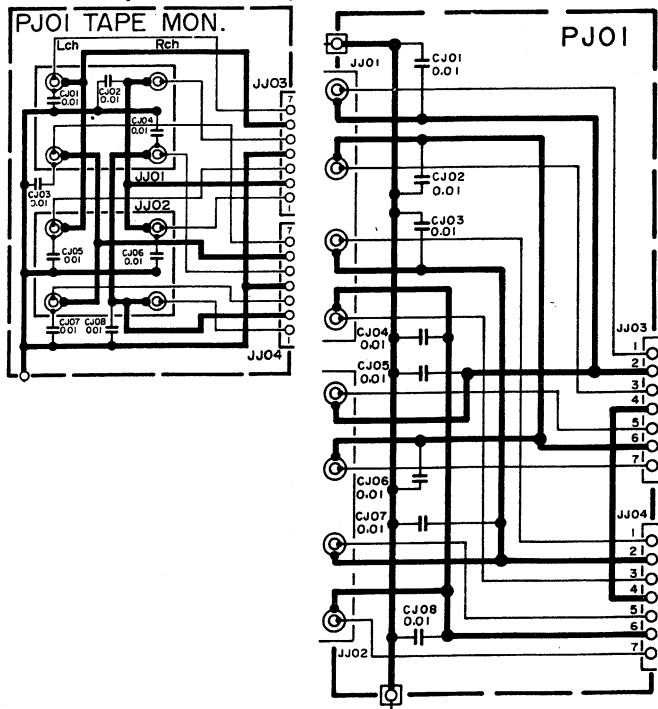


## 6.10 Tape Monitor Assembly (PJ01)

### Schematic Diagram and Component Locations

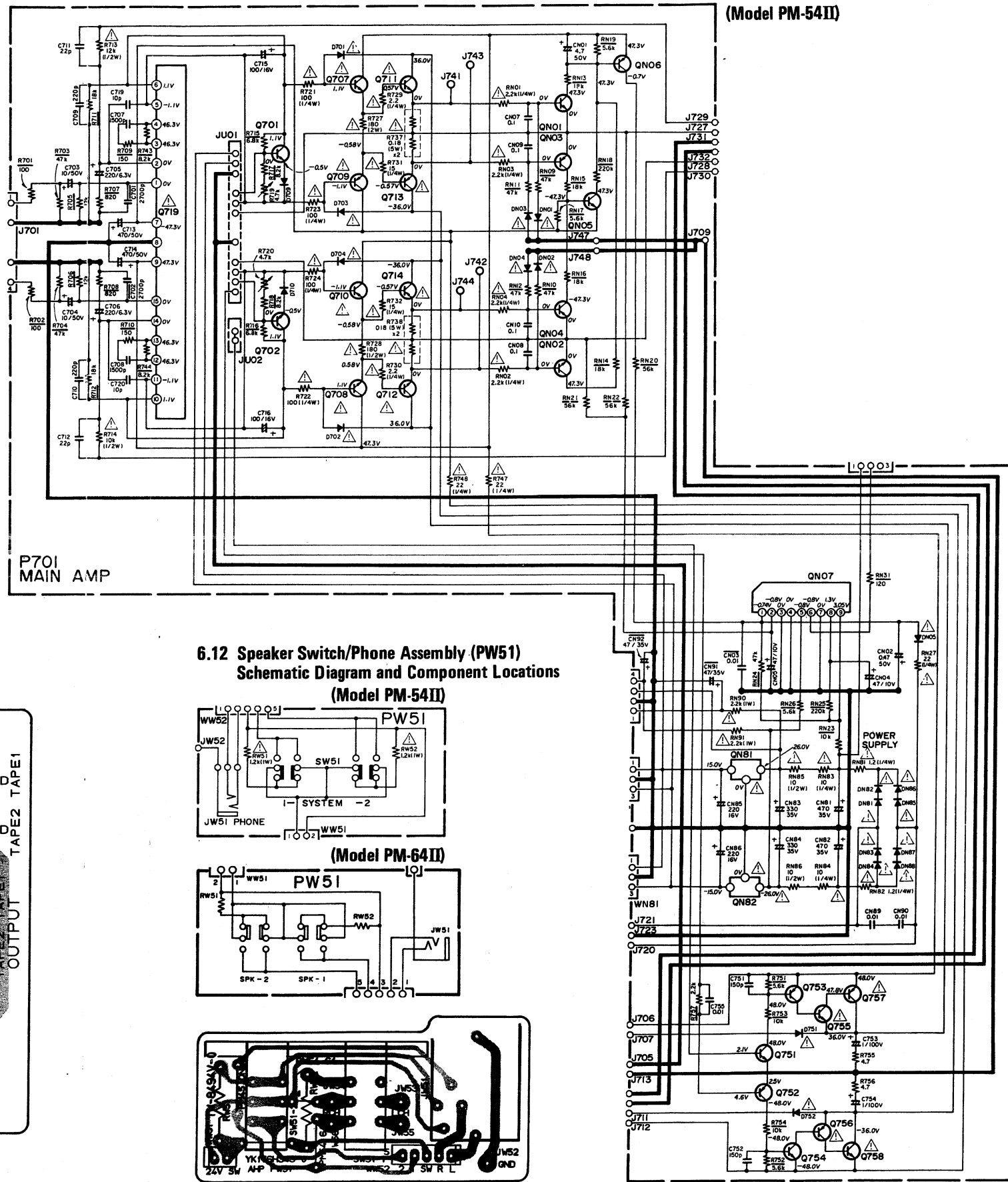
**(Model PM-54II)**

**(Model PM-64II)**



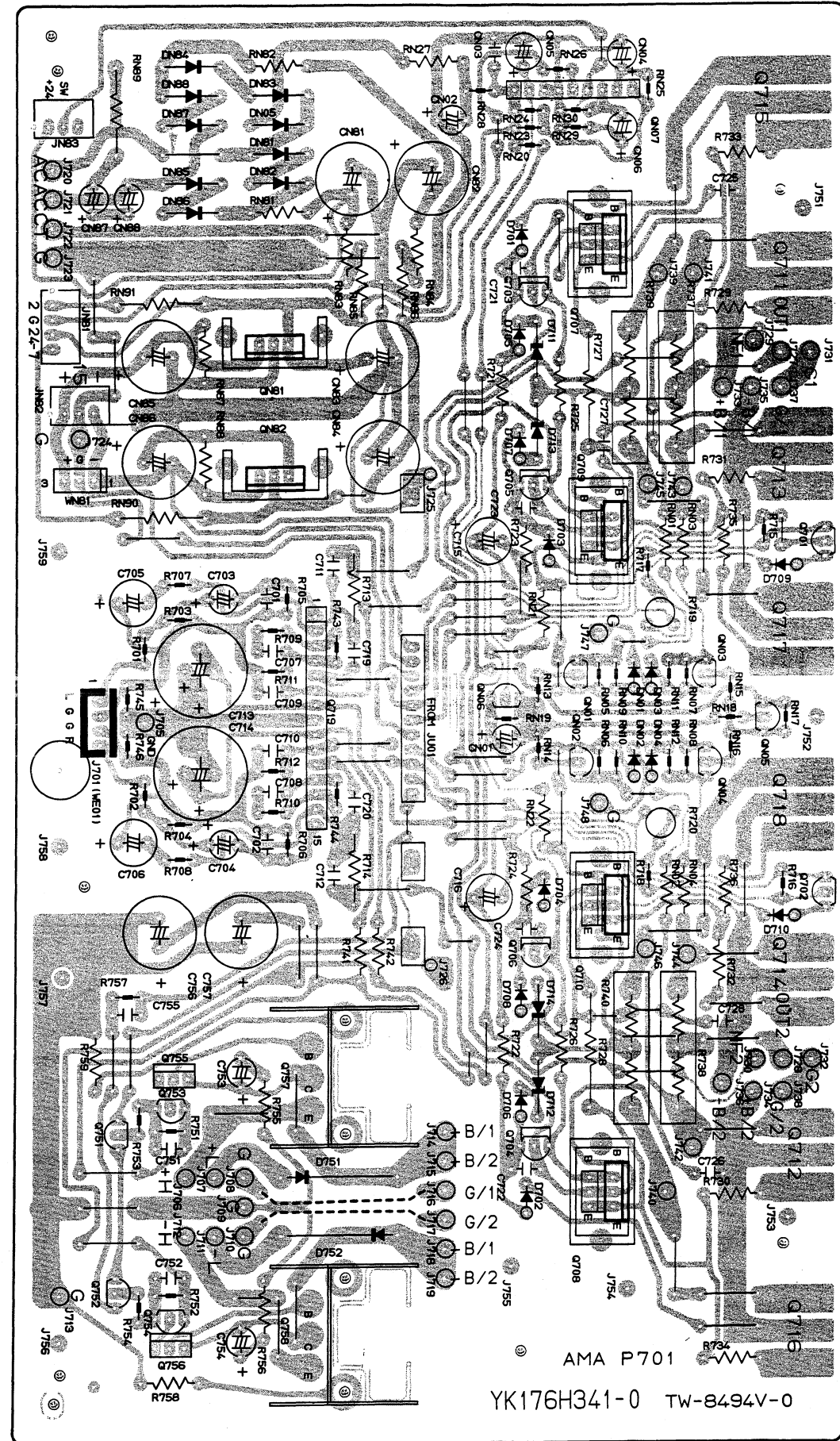
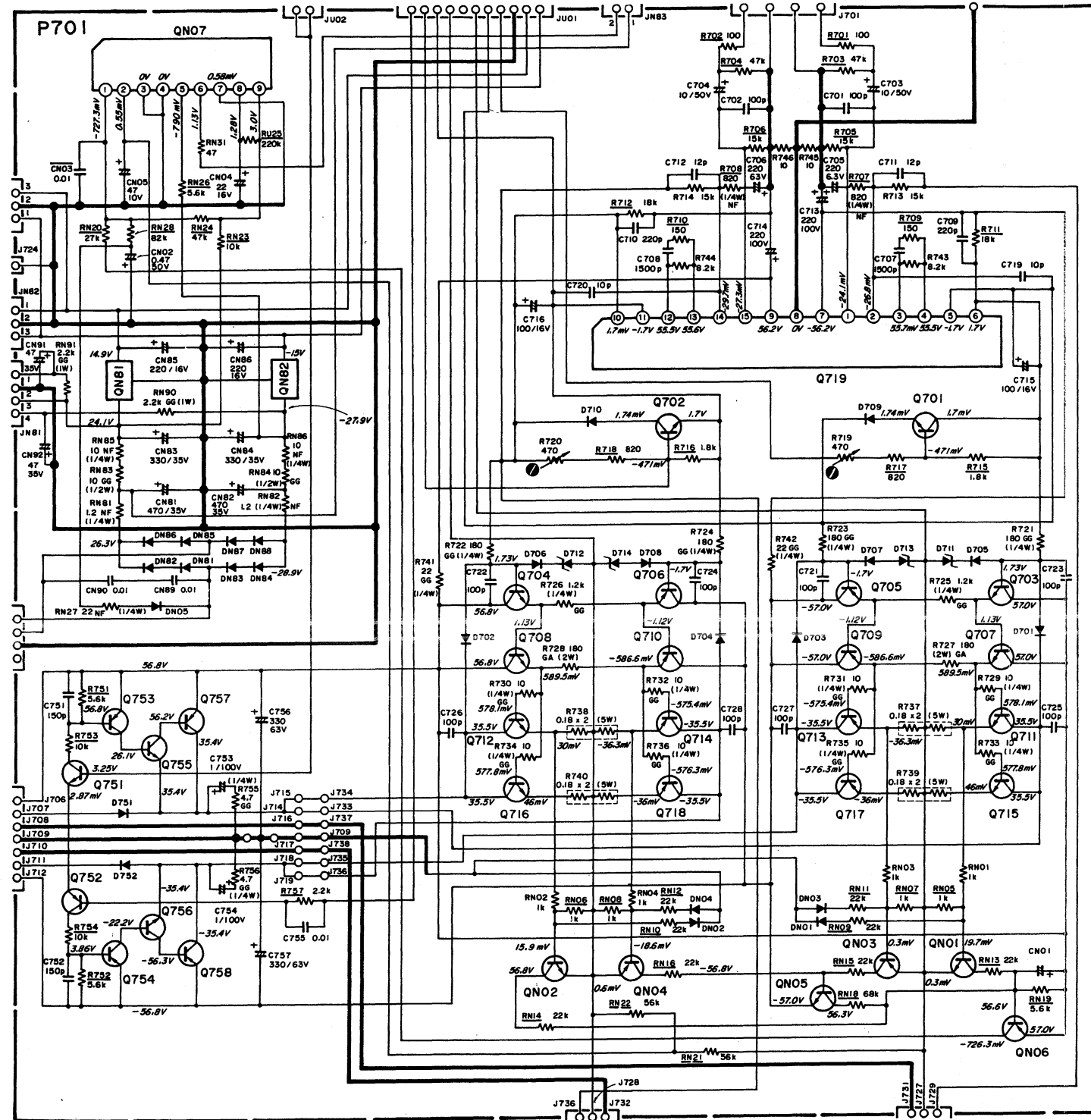
## 6.11 Main Amp Assembly (P701) Schematic Diagram and Component Locations

**(Model PM-54II)**



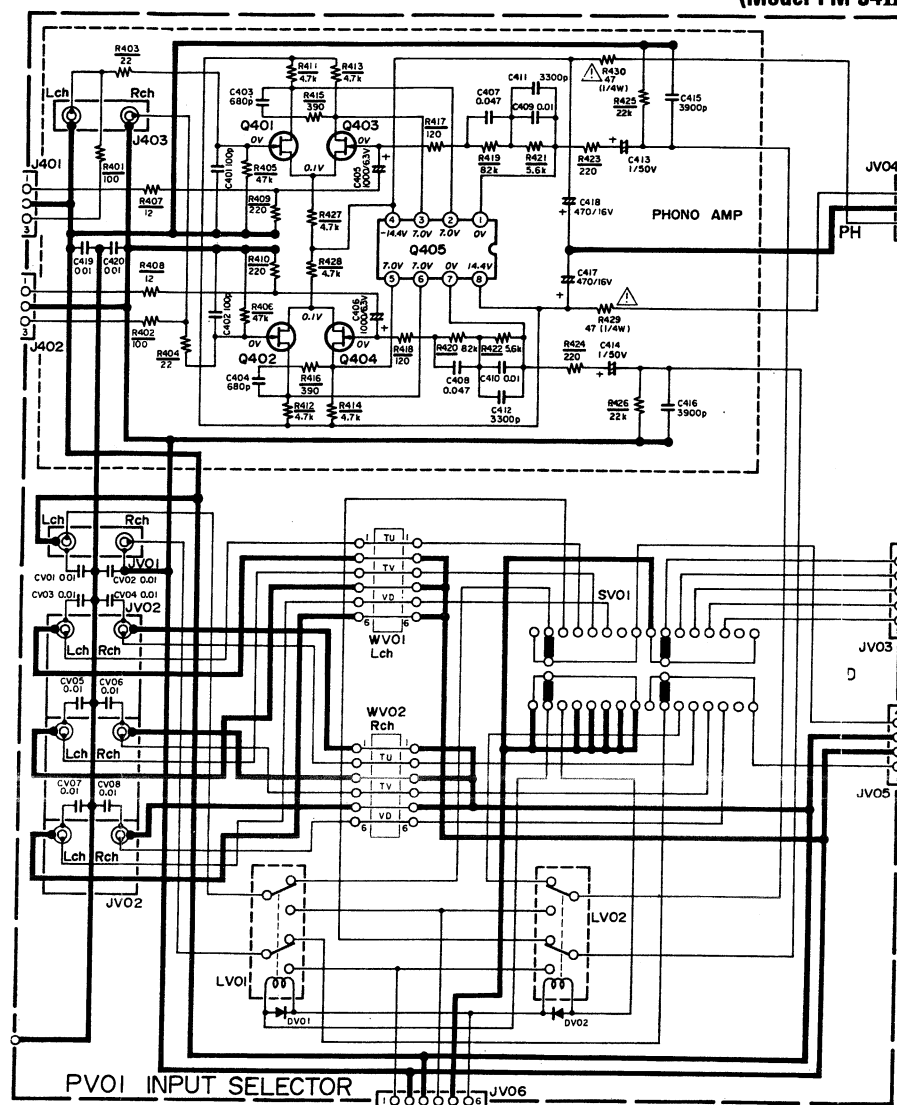


(Model PM-64II)

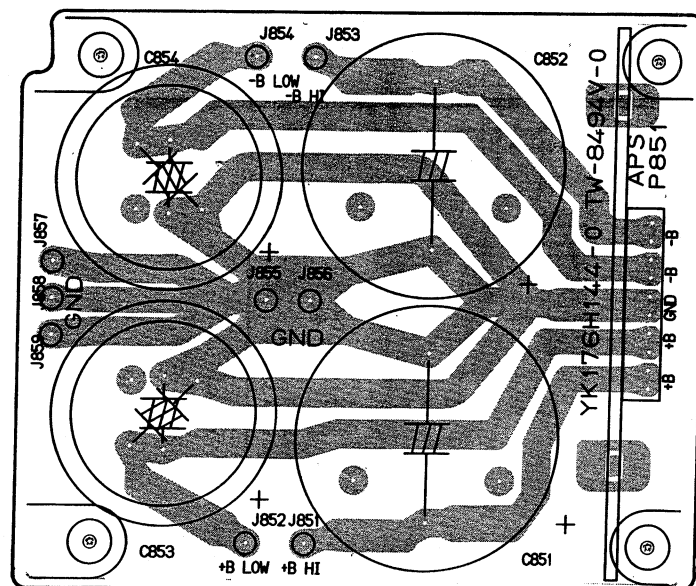
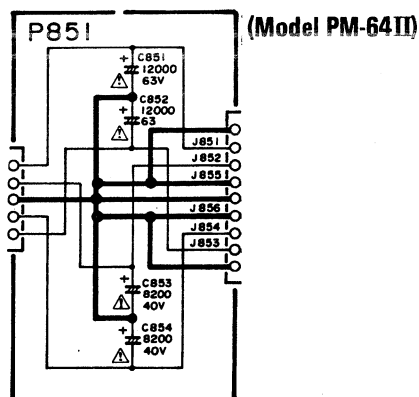
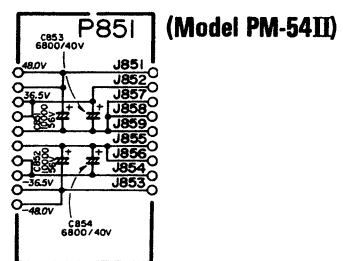


AMA P701  
YK176H341-0 TW-8494V-0

### 6.14 Phono Input Selector Assembly (PV01) Schematic Diagram and Component Locations (Model PM-54II)

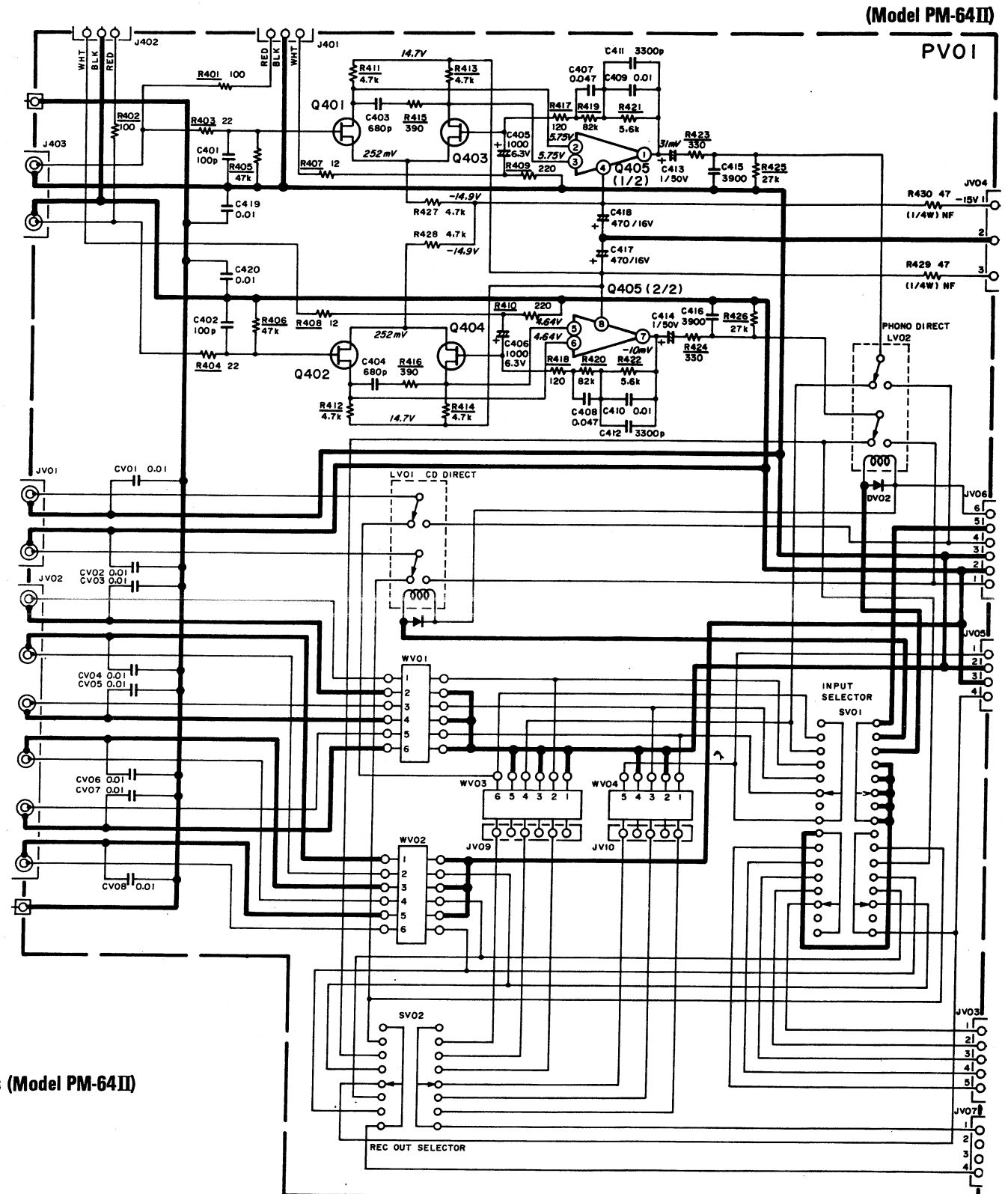
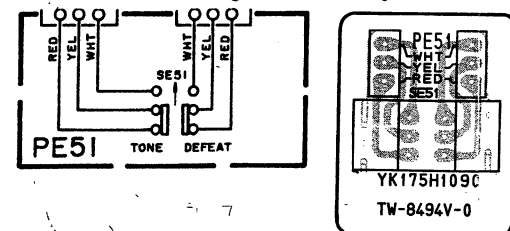


### 6.13 Power Supply Assembly (P851) Schematic Diagram and Component Locations

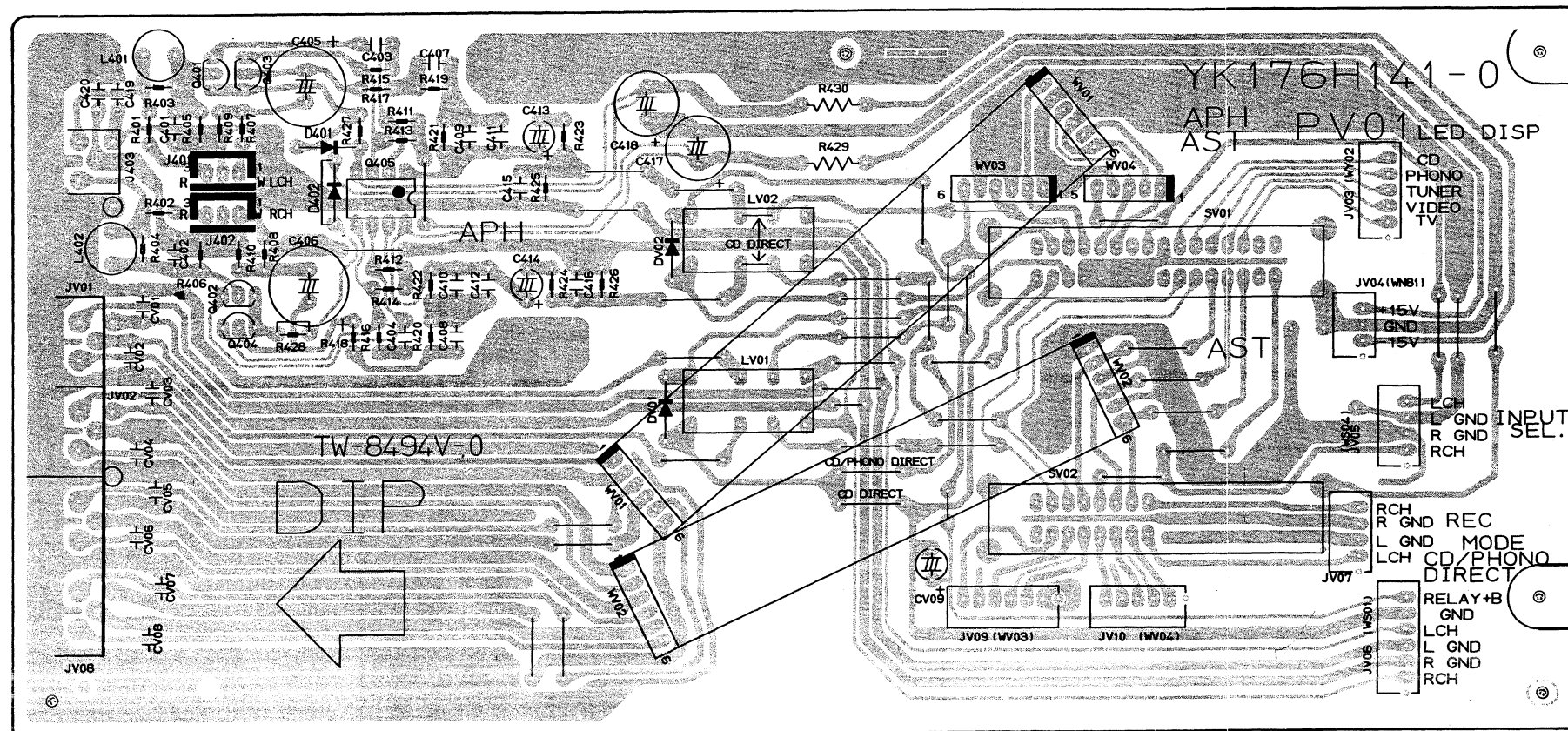


### 6.15 Tone Defeat Switch Assembly (PE51)

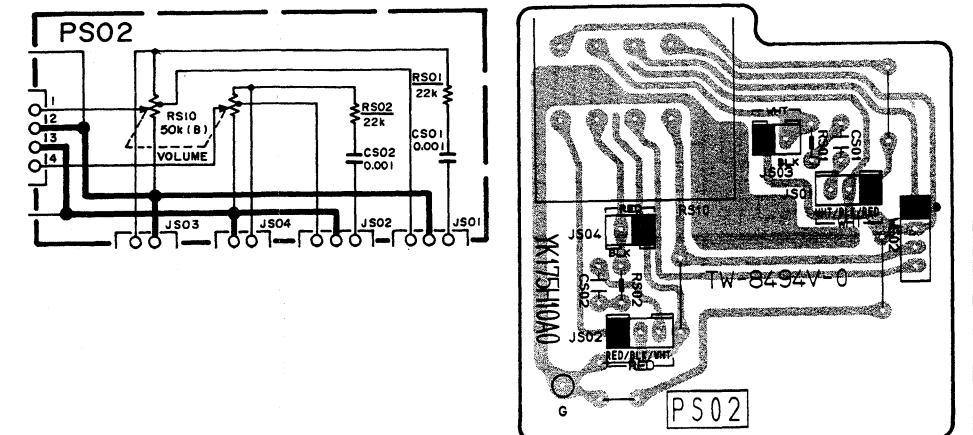
#### Schematic Diagram and Component Locations (Model PM-64II)



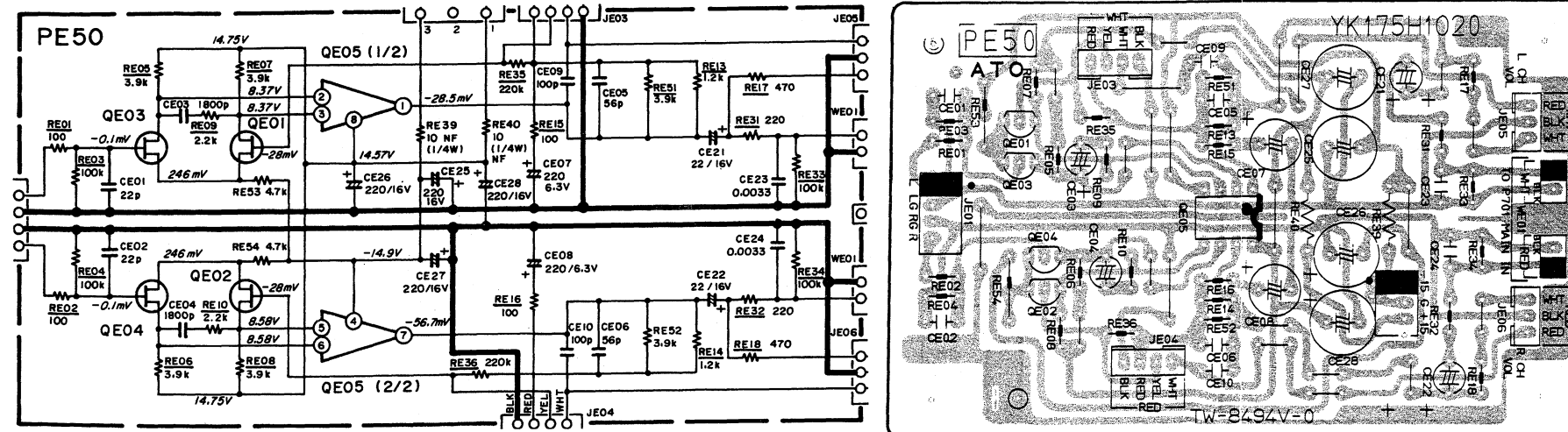




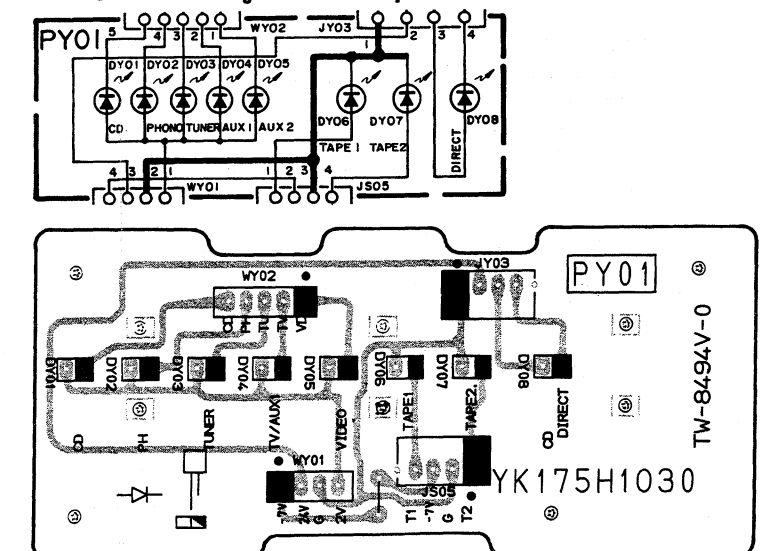
6.17 Master Volume Assembly (PS02)  
Schematic Diagram and Component Locations (Model PM-64II)



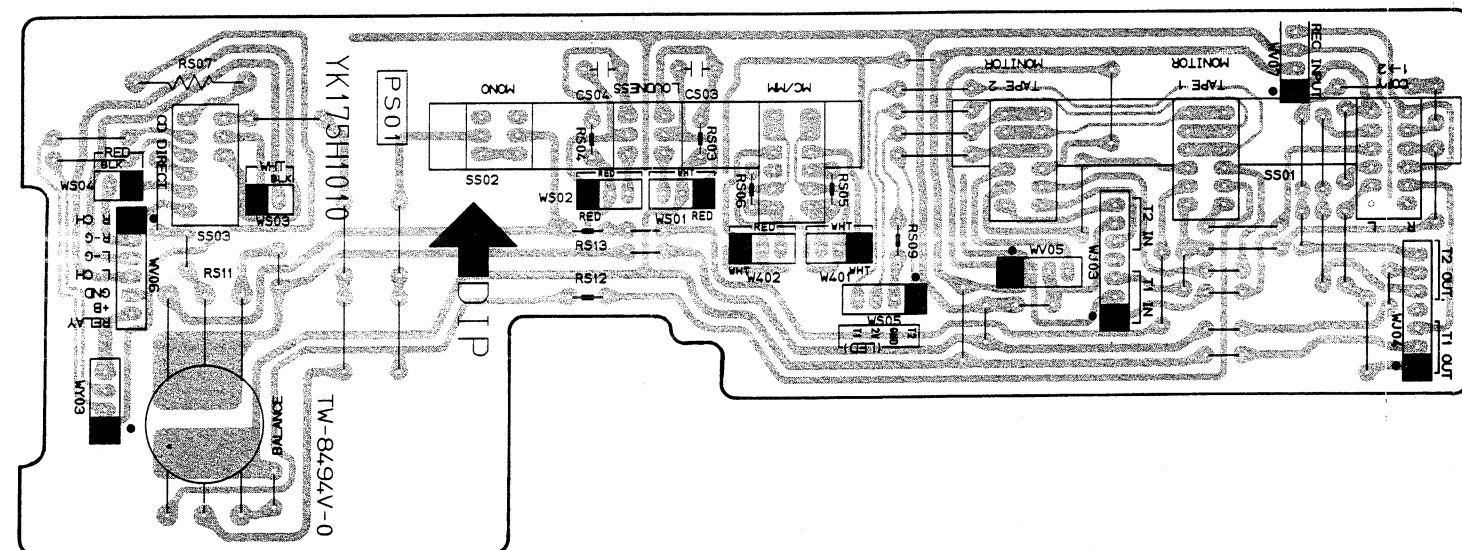
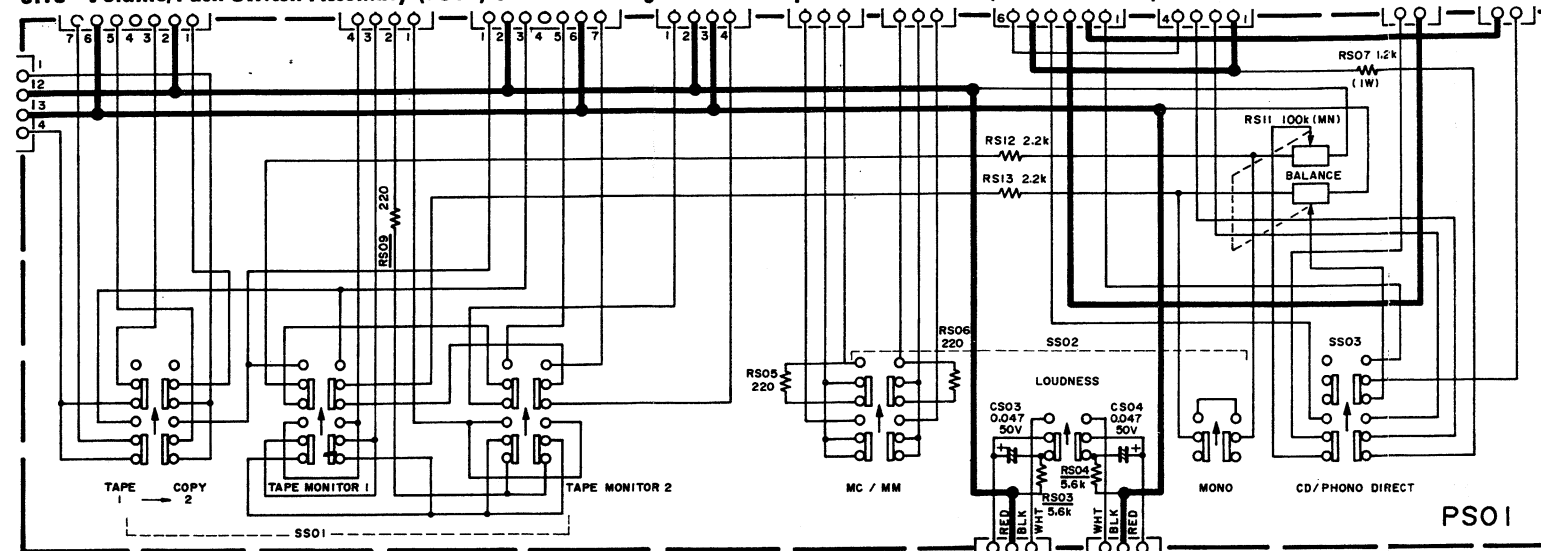
6.16 Tone Unit Assembly (PE50) Schematic Diagram and Component Locations (Model PM-64II)



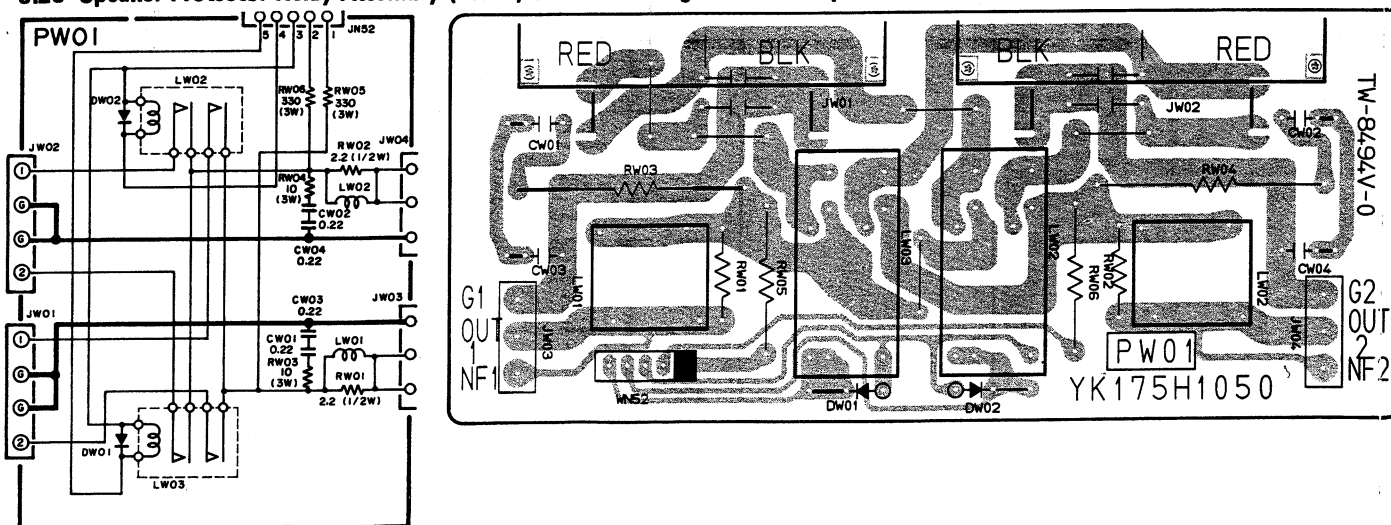
6.18 Input Selector Display Assembly (PY01)  
Schematic Diagram and Component Locations (Model PM-64II)



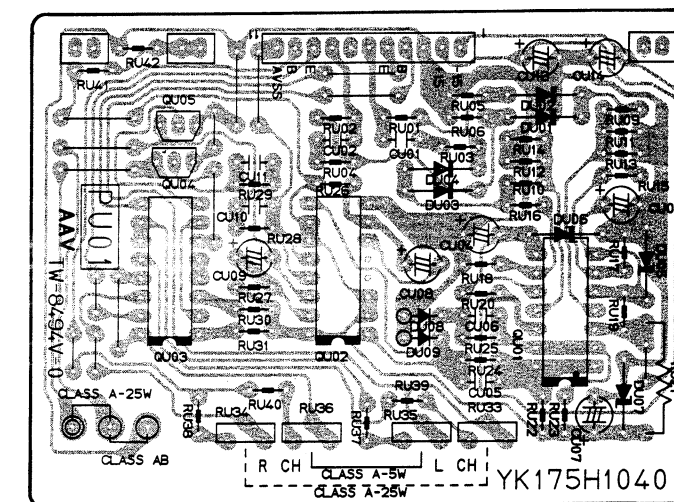
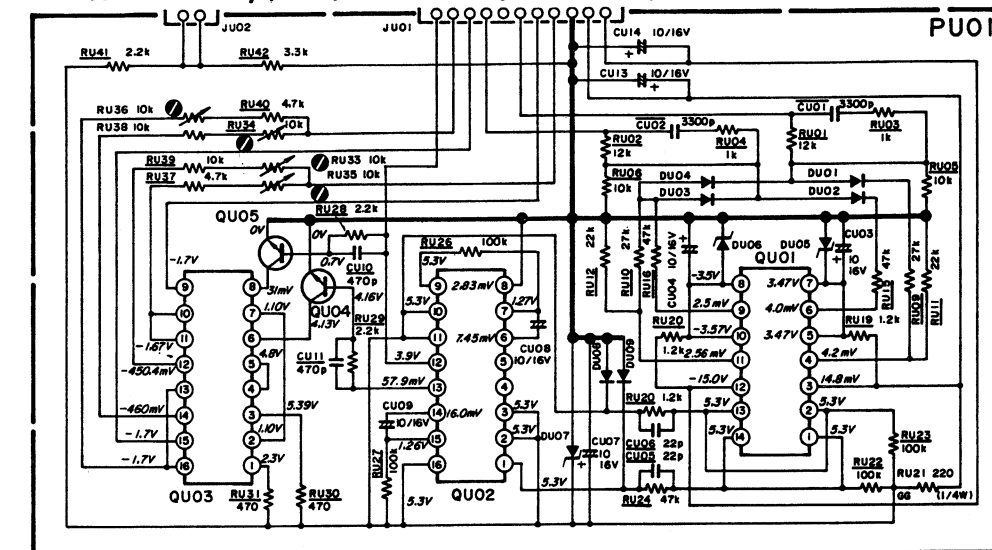
6.19 Volume/Push Switch Assembly (PS01) Schematic Diagram and Component Locations (Model PM-64II)



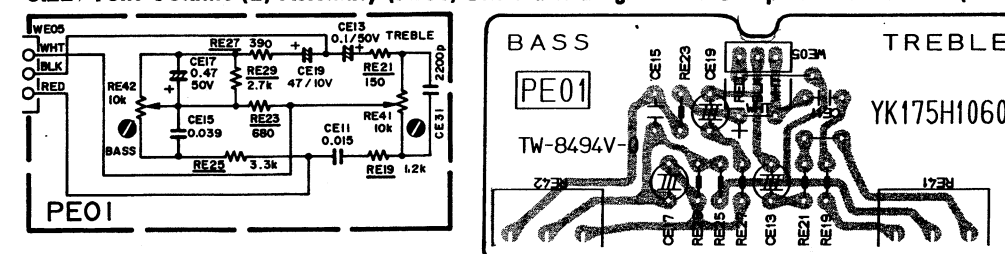
6.20 Speaker Protector Relay Assembly (PW01) Schematic Diagram and Component Locations (Model PM-64II)



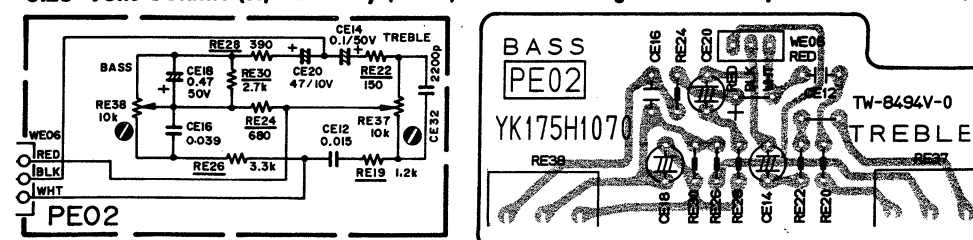
6.21 AVSS Assembly (PU01) Schematic Diagram and Component Locations (Model PM-64II)



6.22 Tone Volume (L) Assembly (PE01) Schematic Diagram and Component Locations (Model PM-64II)

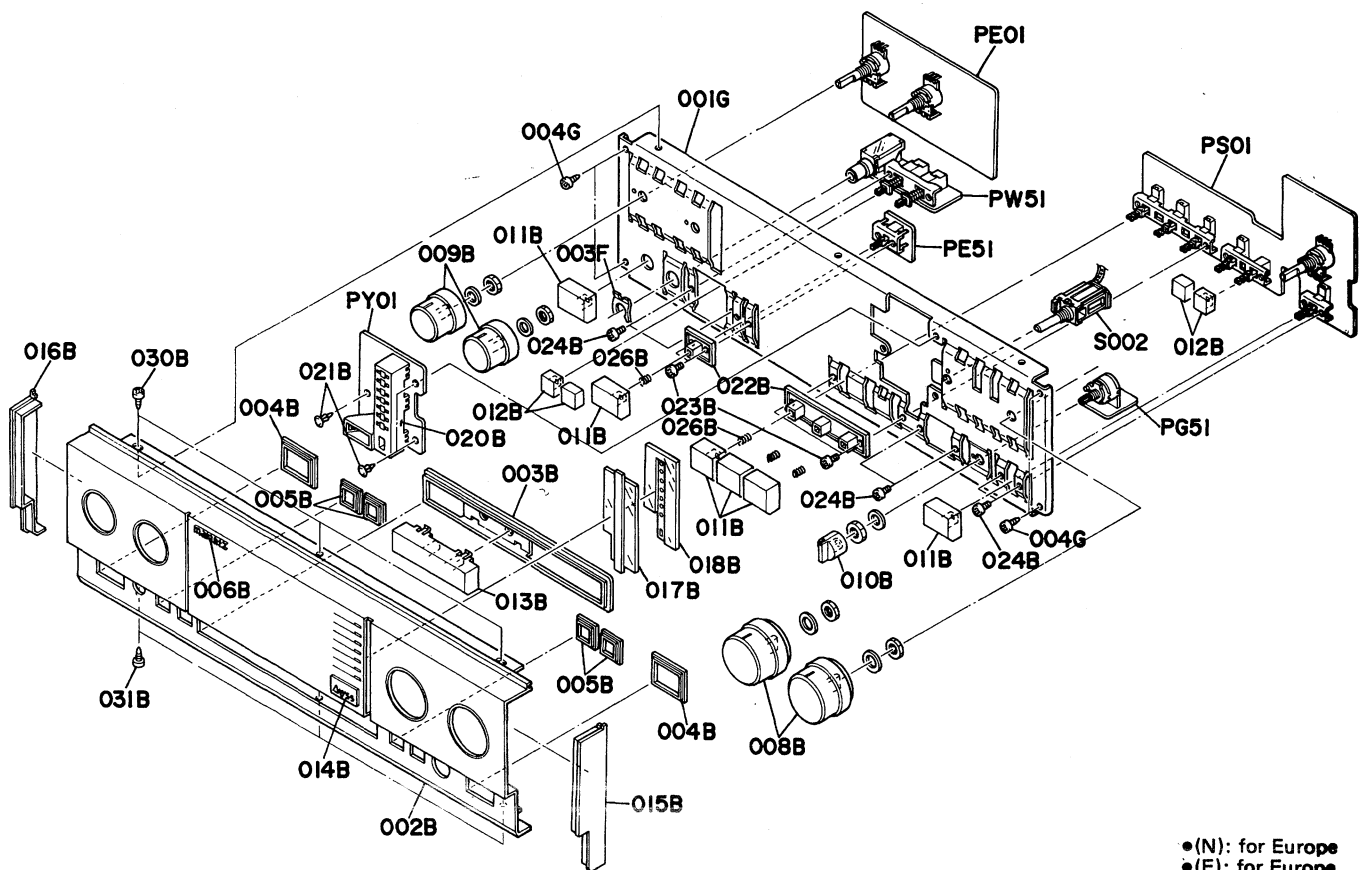


6.23 Tone Volume (R) Assembly (PE02) Schematic Diagram and Component Locations (Model PM-64II)



## 7. EXPLODED VIEW AND PARTS LIST (Model PM-54II)

## [C01-99] Front Panel and Chassis

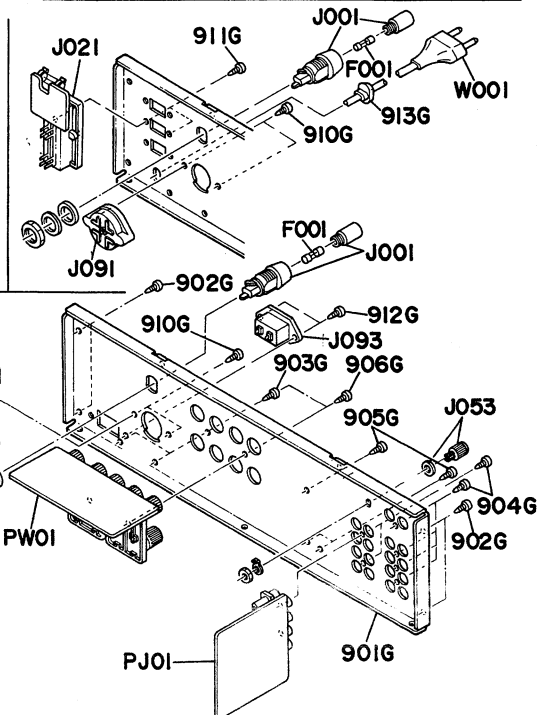
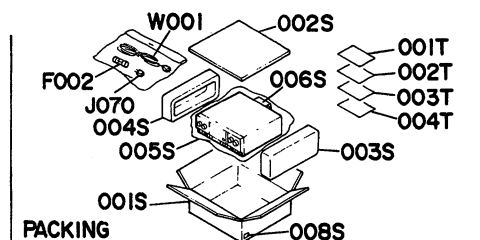
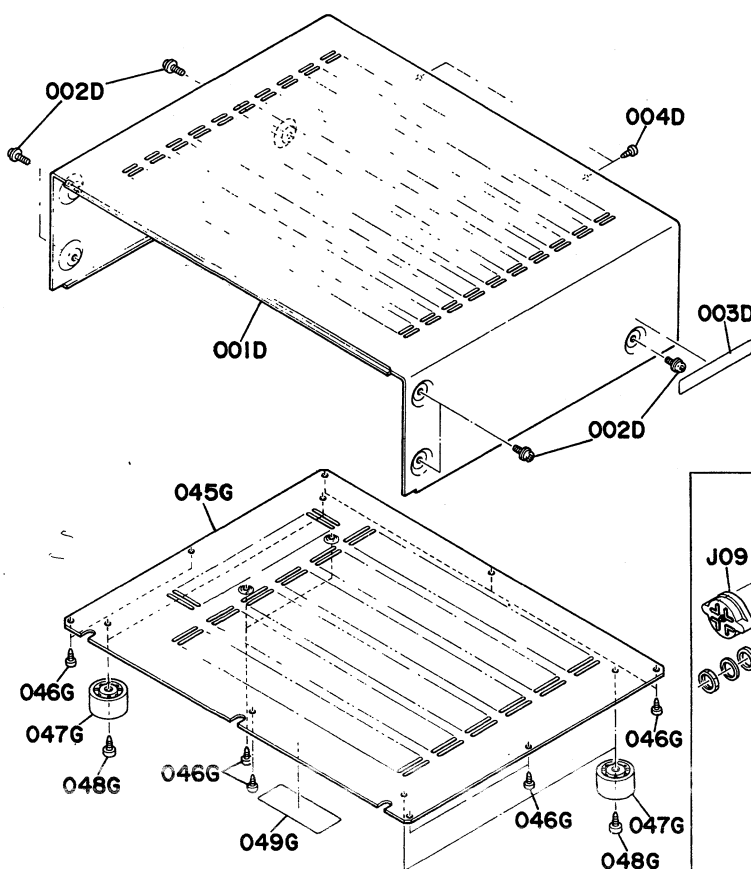


- (N): for Europe
- (E): for Europe
- (A): for Australia
- (F): for Japan
- (G): for PX

REF. DESIG.	PART NO.	DESCRIPTION
A	182H248410	Front Panel Assembly (Gold)
002B	182H248110	Front Panel
003B	176H259020	Bushing      Tone Defeat/Tape Cope
004B	242H259020	Bushing      Power, CD, Phone Direct
005B	242H259030	Bushing      Speaker, Direct
006B	274H251020	Badge      Marantz
013B	263H113010	Stud
014B	175H251010	Badge      AVSS
015B	176H067110	Cap      Front Side (R)
016B	176H067120	Cap      Front Side (L)
017B	263H158010	Window
018B	176H151010	Introducer
A	182H248400	Front Panel Assembly (Black)
002B	182H248010	Front Panel
003B	176H259010	Bushing, Tone Defeat/Tape Cope
004B	242H259120	Bushing, Power, CD/Phone Direct
005B	242H259130	Bushing, Speaker/Loudness
006B	274H251020	Badge, Marantz
013B	263H113110	Stud
014B	175H251010	Badge, AVSS
015B	176H067010	Cap, Right Side
016B	176H067020	Cap, Left Side
017B	263H158010	Window
018B	176H151010	Introducer

REF. DESIG.	PART NO.	DESCRIPTION
008B	176H154010	Knob, Selector/Volume, Black
	176H154110	Knob, Selector/Volume, Gold
009B	176H154020	Knob, Tone Control, Black
	176H154120	Knob, Tone Control, Gold
010B	263H154130	Knob, Balance, Black
	263H154030	Knob, Balance, Gold
011B	242H270110	Button, Black
	242H270010	Button, Gold
012B	242H270120	Button, Black
	242H270020	Button, Gold
020B	176H271010	Holder, LED
021B	2276005050	Clamper
022B	176H051010	Guide, Button
023B	51100306M0	B.H.M. Screw B3 x 6
024B	51100306M0	B.H.M. Screw B3 x 6
026B	176H115010	Spring, Button
030B	51280308M0	B.H. Tapped Screw B3 x 8
031B	51280308M0	B.H. Tapped Screw B3 x 8
003F	198T114010	Stopper, Headphone Jack
001G	176H105010	Chassis, Front
004G	51280308M0	B.H. Tapped Screw B3 x 8
S002	SR00050210	Rotary Switch, Input Selector

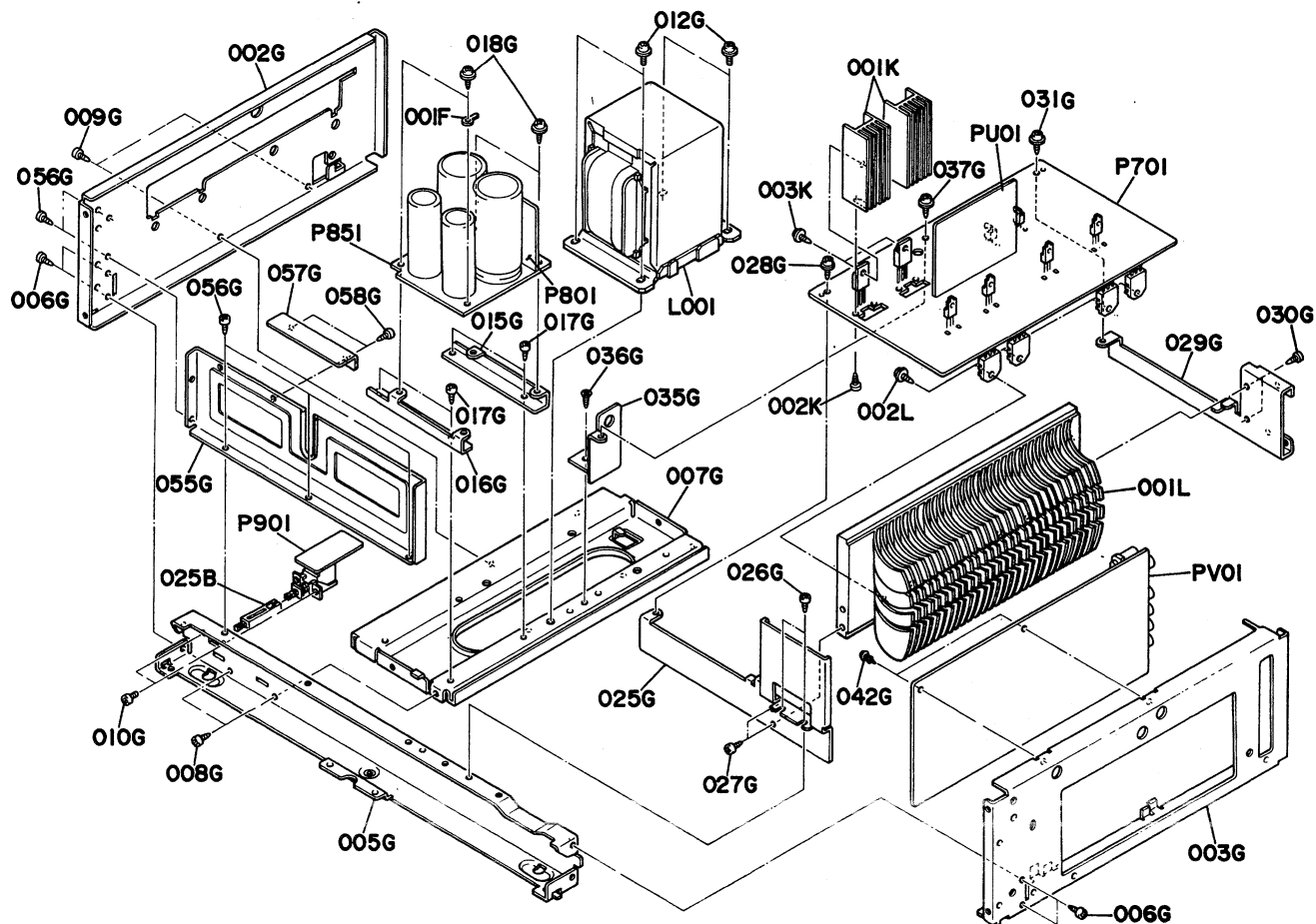
**[C02-99] Lid and Packing Materials**



REF. DESIG.	PART NO.	DESCRIPTION
001D	176H257010	Lid, Top Cover, Black
	176H257030	Lid, Top Cover, Gold
002D	51260408M0	B.T. Screw B4 x 8
003D	2911861140	Label, Caution
004D	51280308M0	B.H. Tapped Screw B3 x 8
045G	268H257020	Lid, Bottom Cover
046G	51280308M0	B.H. Tapped Screw B3 x 8
047G	2759057010	Leg
048G	51280410M0	B.H. Tapped Screw B4 x 10
049G	2911861110	Label, Caution
901G	182H250010	Rear Panel [N, A]
	182H250020	Rear Panel [E, G]
902G	51280308M0	B.H. Tapped Screw B3 x 8
903G	51280308M0	B.H. Tapped Screw B3 x 8
904G	51280308M0	B.H. Tapped Screw B3 x 8
905G	51280308M0	B.H. Tapped Screw B3 x 8
906G	51280308M0	B.H. Tapped Screw B3 x 8
910G	51280308M0	B.H. Tapped Screw B3 x 8
911G	51280308M0	B.H. Tapped Screw B3 x 8 [E, G]
912G	51280308M0	B.H. Tapped Screw B3 x 8 [N, A]
913G	1455259090	Bushing, AC Power Cord [E, G]
Δ F001	FS10160850	Fuse T1.6A 250V [N, A]
	FS10200850	Fuse T2.0A 250V [E, G]

REF. DESIG.	PART NO.	DESCRIPTION
△ J001	YJ08000290	Jack, Fuse Holder
△ J021	YJ04000730	Jack, AC Outlet; 3P [E, G]
J053	YT01010150	Terminal, GND
△ J091	BY05030040	Voltage Selector [N, A]
	BY05080040	Voltage Selector [E, G]
△ J093	YP04000610	Plug, AC Inlet [N, A]
△ W001	YC01800370	A.C. Power Cord [E, G]
<b>PACKING</b>		
001S	182H801010	Packing Case [N, A]
	182H801020	Packing Case [E, G]
002S	176H807010	Reinforcing [E, G]
003S	263H809010	Cushion, Right
004S	263H809020	Cushion, Left
005S	9091111030	Polyethylene Sheet
006S	2864804010	Sleeve, AC Power Cord [E, G]
008S	9526019050	Serial No. Card [G]
001T	176H851310	User Manual
002T	182H851320	User Manual, Spec
003T	182H856010	Circuit Diagram [N, E]
	416H854010	Warranty Card [G]
004T	9631000090	Warranty Card [A]
△ F002	FS10400850	Fuse T4.0A 250V [E, G]
△ J070	YJ04001240	Jack, AC Adapter [E, G]
△ W001	ZC01805030	A.C. Power Cord [N]
	ZC02006030	A.C. Power Cord [A]

[C03-99] Chassis and General Parts



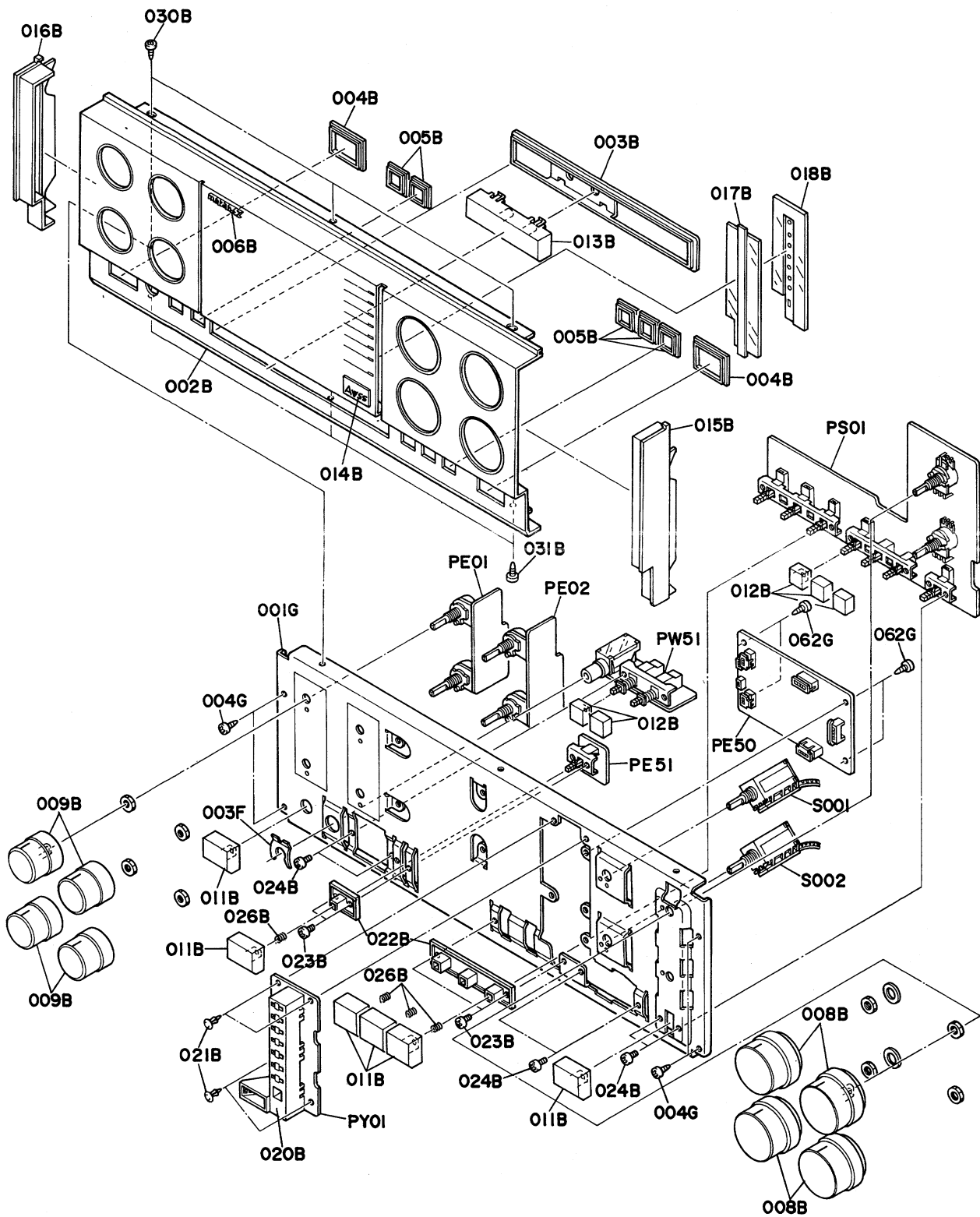
REF. DESIG.	PART NO.	DESCRIPTION
025B	176H125010	Joint, Power Switch
001F	62030049W0	Lug, Earth
002G	176H105020	Chassis, Left Side
003G	176H105030	Chassis, Right Side
005G	176H126010	Stay, Center
006G	51280308M0	B.H. Tapped Screw B3 x 8
007G	176H160010	Bracket, Power Transformer
008G	51280308M0	B.H. Tapped Screw B3 x 8
009G	51280308M0	B.H. Tapped Screw B3 x 8
010G	51100306M0	B.H.M. Screw B3 x 6
012G	51706009Z0	Special Set Screw
015G	176H104040	Retainer, Rear
016G	176H104050	Retainer, Front
017G	51280308M0	B.H. Tapped Screw B3 x 8
018G	51280308M0	B.H. Tapped Screw B3 x 8
025G	176H104080	Retainer, Heatsink; Front
026G	51280308M0	B.H. Tapped Screw B3 x 8
027G	51280308M0	B.H. Tapped Screw B3 x 8
028G	51260308M0	B.T. Screw B3 x 8
029G	176H104090	Retainer, Heatsink; Rear
030G	51280308M0	B.H. Tapped Screw B3 x 8
031G	51280308M0	B.H. Tapped Screw B3 x 8

REF. DESIG.	PART NO.	DESCRIPTION
035G	176H104070	Retainer, Main P.W. Board
036G	51280308M0	B.H. Tapped Screw B3 x 8
037G	51260308M0	B.T. Screw B3 x 8
042G	2276005050	Clamper
055G	176H109010	Shield
056G	51280308M0	B.H. Tapped Screw B3 x 8
057G	182H109010	Shield
058G	51280308M0	B.H. Tapped Screw B3 x 8
001L	176H267130	Heatsink, Main
002L	51260312M0	B.T. Screw B3 x 12
001K	182H267010	Heatsink (Q757, Q758)
002K	51282608B0	B.H. Tapped Screw B2.6 x 8
003K	51100308M0	B.H.M. Screw B3 x 8
Δ L00I	TS18507050	Power Transformer [N, A]
	TS18507060	Power Transformer [E, G]



(Model PM-64II)

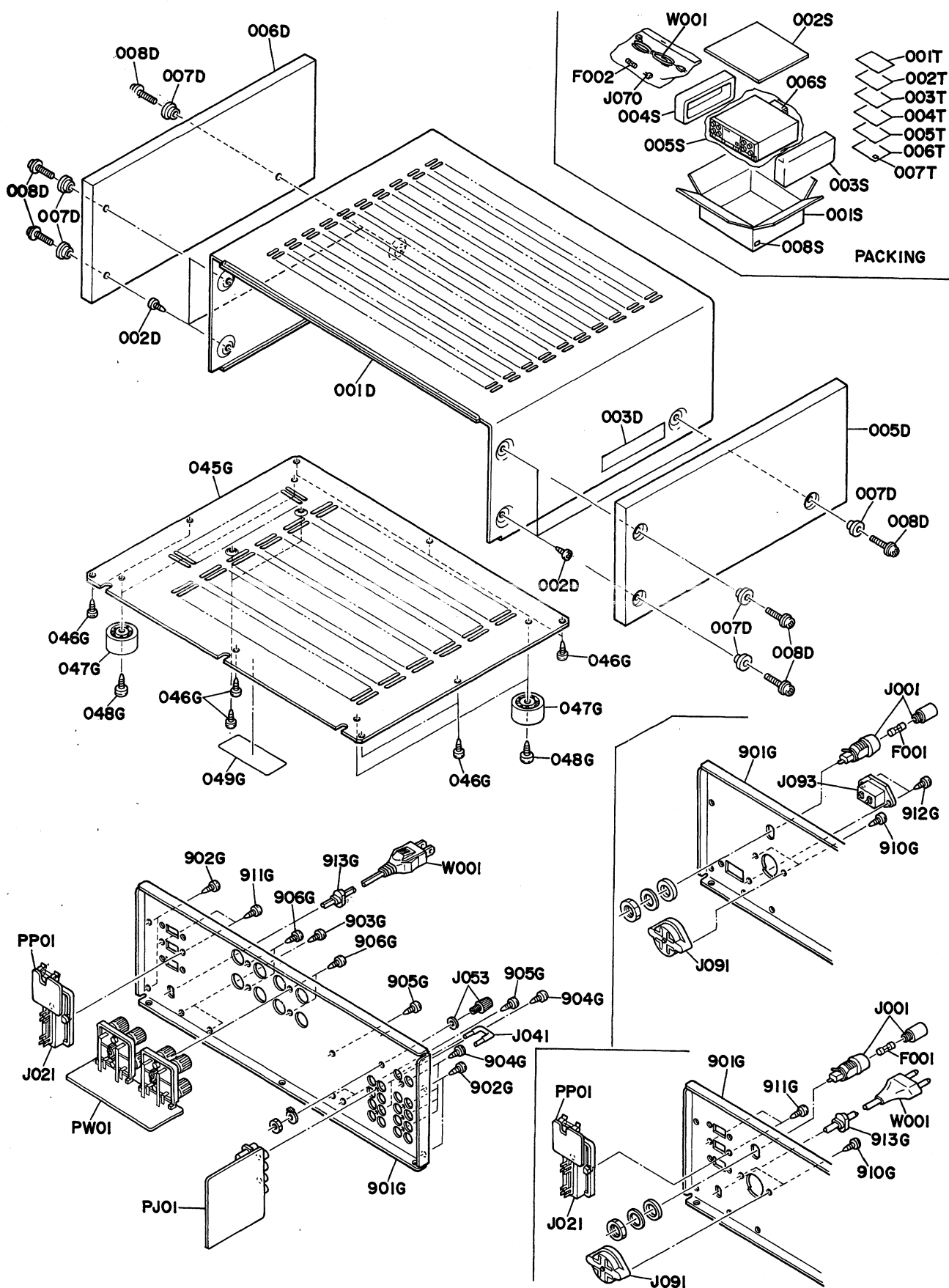
[C04-99] Front Panel and Chassis



REF. DESIG.	PART NO.	DESCRIPTION
A A1	175H248400	<b>PM-64MKII</b> Front Panel Assembly (Black)
	175H248410	Front Panel Assembly (Gold)
002B	175H248020	Front Panel (Black)
	175H248030	Front Panel (Gold)
003B	176H259010	Bushing, Tone Defeat/Tape Cope (Black)
	176H259020	Bushing, Tone Defeat/Tape Cope (Gold)
004B	242H259120	Bushing, Power/CD, Phono Direct (Black)
	242H259020	Bushing, Power/CD, Phono Direct (Gold)
005B	242H259130	Bushing, Speaker/Loudness/etc. (Black)
	242H259030	Bushing, Speaker/Loudness/etc. (Gold)
006B	274H251020	Badge, Marantz
013B	263H113110	Stud (Black)
	263H113010	Stud (Gold)
014B	175H251010	Badge, AVSS
015B	242H067110	Cap, Right Side (Black)
	242H067010	Cap, Right Side (Gold)
016B	242H067120	Cap, Left Side (Black)
	242H067020	Cap, Left Side (Gold)
017B	242H158010	Window
018B	175H151010	Introducer
A	175H248420	<b>PM-74D</b> Front Panel Assembly
002B	175H248010	Front Panel
003B	176H259010	Bushing, Tone Defeat/Tape Cope
004B	242H259120	Bushing, Power/CD, Phono Direct
005B	242H259130	Bushing, Speaker/Loudness/etc.
006B	274H251020	Badge, Marantz
013B	263H113110	Stud
014B	175H251010	Badge, AVSS
015B	242H067110	Cap, Right Side
016B	242H067120	Cap, Left Side
017B	242H158010	Window
018B	175H151010	Introducer

REF. DESIG.	PART NO.	DESCRIPTION
008B	175H154010	Knob (Black)
	175H154020	Knob (Gold)
009B	175H154030	Knob (Black)
	175H154040	Knob (Gold)
011B	242H270110	Button (Black)
	242H270010	Button (Gold)
012B	242H270120	Button (Black)
	242H270020	Button (Gold)
020B	175H271010	Holder, LED
021B	51260308M0	B.T. Screw B3 x 8
022B	176H051010	Guide, Button
023B	51100306M0	B.H.M. Screw B3 x 6
024B	51100306M0	B.H.M. Screw B3 x 6
026B	176H115010	Spring, Button
030B	51280308M0	B.H. Tapped Screw B3 x 8
031B	51280308M0	B.H. Tapped Screw B3 x 8
003F	198T114010	Stopper, Headphone Jack
001G	175H105010	Chassis, Front
004G	51280308M0	B.H. Tapped Screw B3 x 8
062G	51280308M0	B.H. Tapped Screw B3 x 8
S001	SR00050230	Rotary Switch, Function Selector
S002	SR00060090	Rotary Switch, Rec Selector

**[C05-99] Lid and Packing Materials**





REF. DESIG.	PART NO.	DESCRIPTION
001D	175H257010	Lid, Top Cover (Black)
	175H257020	Lid, Top Cover (Gold)
	175H257030	Lid, Top Cover [F]
002D	51260408M0	B.T. Screw B4 x 8 [N, A, E, G]
003D	2911861140	Label, Caution [N, A, E, G]
005D	175H249110	Side Panel (R) [F]
006D	175H249120	Side Panel (L) [F]
007D	3906259010	Bushing [F]
008D	51280430U0	B.H. Tapped Screw [F]
045G	268H257020	Lid, Bottom Cover
046G	51280308M0	B.H. Tapped Screw B3 x 8
047G	2759057010	Leg [N, A, E, G]
	176H057020	Leg [F]
048G	51280410M0	B.H. Tapped Screw B4 x 10
049G	2911861110	Label, Caution [N, A, E, G]
901G	175H250020	Rear Panel [N, A]
	175H250030	Rear Panel [E, G]
	175H250010	Rear Panel [F]
902G	51280308M0	B.H. Tapped Screw B3 x 8
903G	51280308M0	B.H. Tapped Screw B3 x 8
904G	51280308M0	B.H. Tapped Screw B3 x 8
905G	51280308M0	B.H. Tapped Screw B3 x 8
906G	51280308M0	B.H. Tapped Screw B3 x 8
910G	51280308M0	B.H. Tapped Screw B3 x 8 [N, E, A, G]
911G	51280308M0	B.H. Tapped Screw B3 x 8 [E, G, F]
912G	51280308M0	B.H. Tapped Screw B3 x 8 [N, A]
913G	1455259090	Bushing, AC Power Cord [E, G, F]
△ F001	FS10315850	Fuse T3.15A 250V [E]
	FS10250850	Fuse T2.5A 250V [N, A, G]
△ J001	YJ08000290	Jack, Fuse Holder [N, E, A, G]
△ J021	YJ04000730	Jack, AC Outlet; 3P [E, G, F]
J053	YT01010150	Terminal, GND
△ J091	BY05030040	Voltage Selector [N, A]
	BY05080040	Voltage Selector [E, G]
△ J093	YP04000610	Plug, AC Inlet [N, A]
△ W001	YC01800370	A.C. Power Cord [E, G, F]
J041	YQ01000020	Shote Plug [F]

REF. DESIG.	PART NO.	DESCRIPTION
001S	175H801010	<b>PACKING</b>
	175H801020	Packing Case [F]
	175H801030	Packing Case [N, A]
002S	175H807010	Packing Case [E, G]
003S	175H809010	Reinforcing [E, G]
004S	175H809020	Cushion, Right
005S	9091111030	Cushion, Left
006S	2864804010	Polyethylene Sheet
008S	9526019050	Sleeve, AC Power Cord [E, G, F]
		Serial No. Card [G]
001T	175H851310	User Manual [N, F, A, G]
	175H851110	User Manual [F]
002T	175H851320	User Manual, Spec [N, E, A, G]
003T	175H856010	Circuit Diagram [N, E]
	416H854010	Warranty Card [G]
004T	9631000090	Warranty Card [A]
	9631000130	Warranty Card [F]
005T	128T854010	Warranty Card [F]
006T	9611000050	Warranty Card [F]
007T	9540000010	License [F]
△ F002	FS10630850	Fuse T6.3A 250V [E, G]
△ J070	YJ04001240	Jack, AC Adapter [E, G]
△ W001	ZC01805030	A.C. Power Cord [N]
	ZC02006030	A.C. Power Cord [A]

This diagram illustrates the exploded view of the front panel assembly for a radio receiver. The components are labeled as follows:

- 002G**: Main front panel frame.
- 009G**, **006G**, **056G**: Screws and mounting hardware for the top and side panels.
- 018G**, **002F**, **004F**: Screws and mounting hardware for the top panel.
- 012G**: Screws for the top panel.
- 010K**, **002K**, **001K**: Components for the top panel.
- 005K~008K**, **031G**, **003K**, **051K**: Components for the top panel.
- 011K**, **004K**: Components for the top panel.
- 037G**: Component for the top panel.
- 052K**, **028G**: Components for the top panel.
- 053K**, **002L**: Components for the top panel.
- 029G**, **030G**: Components for the top panel.
- 001L**: Component for the top panel.
- P851**, **016G**, **015G**, **017G**: Components for the top panel.
- P801**, **017G**: Components for the top panel.
- L001**: Component for the top panel.
- 036G**, **035G**: Components for the top panel.
- 007G**: Component for the top panel.
- 055G**: Component for the top panel.
- C901**, **030F**: Components for the top panel.
- 025B**: Component for the top panel.
- S901**: Component for the top panel.
- 010G**, **008G**: Components for the top panel.
- 005G**: Component for the top panel.
- 005F**, **001F**: Components for the top panel.
- 026G**, **025G**: Components for the top panel.
- 027G**: Component for the top panel.
- 043G**: Component for the top panel.
- PV01**: Component for the top panel.
- 003G**: Component for the top panel.
- 006G**: Component for the top panel.

REF. DESIG.	PART NO.	DESCRIPTION
0025B	176H125010	Joint, Power Switch
001F	62030049W0	Lug, Earth
002F	62030049W0	Lug, Earth
004F	62030049W0	Lug
005F	51280306M0	B.H. Tapped Screw B3 x 6
030F	139T120200	Insulator
002G	176H105020	Chassis, Left Side
003G	176H105030	Chassis, Right Side
005G	176H126010	Stay, Center
006G	51280308M0	B.H. Tapped Screw B3 x 8
007G	176H160010	Bracket, Power Transformer
008G	51280308M0	B.H. Tapped Screw B3 x 8
009G	51280308M0	B.H. Tapped Screw B3 x 8
010G	51100306M0	B.H.M. Screw B3 x 6
012G	51706009Z0	Special Set Screw
015G	176H104040	Retainer, Rear
016G	176H104050	Retainer, Front
017G	51280308M0	B.H. Tapped Screw B3 x 8
018G	51260308M0	B.T. Screw B3 x 8
025G	176H104080	Retainer, Heatsink; Front
026G	51280308M0	B.H. Tapped Screw B3 x 8
027G	51280308M0	B.H. Tapped Screw B3 x 8
028G	51260308M0	B.T. Screw B3 x 8
029G	176H104090	Retainer, Heatsink; Rear
030G	51280308M0	B.H. Tapped Screw B3 x 8
031G	51280308M0	B.H. Tapped Screw B3 x 8

REF. DESIG.	PART NO.	DESCRIPTION
035G	176H104070	Retainer, Main P.W. Board
036G	51500308M0	F.H. Taptite Screw F3 x 8
037G	51260308M0	B.T. Screw B3 x 8
043G	2276005050	Clamper
055G	176H109010	Shield
056G	51280308M0	B.H. Tapped Screw B3 x 8
001L	174H267010	Heatsink, Main
002L	51260312M0	B.T. Screw B3 x 12
001K	264H267030	Heatsink (QN81)
002K	264H267030	Heatsink (QN82)
003K	51100308M0	B.H.M. Screw B3 x 8
004K	51100308M0	B.H.M. Screw B3 x 8
005K	176H267040	Heatsink (Q707)
006K	176H267040	Heatsink (Q708)
007K	176H267040	Heatsink (Q709)
008K	176H267040	Heatsink (Q710)
010K	182H267010	Heatsink (Q757)
011K	182H267010	Heatsink (Q758)
051K	51280308M0	B.H. Tapped Screw B3 x 6
052K	51280308M0	B.H. Tapped Screw B3 x 8
053K	51280308M0	B.H. Tapped Screw B3 x 8
△ L001	TS19628010	Power Transformer [N, A]
	TS19628020	Power Transformer [E, G]
	TS19628030	Power Transformer [F]
△ C901	DK18103840	Ceramic Cap. 0.01μF 250V
	DK18103850	Ceramic Cap. 0.01μF 250V
△ S901	SP01010820	Push Switch, Power

•(N): for Europe  
•(E): for Europe  
•(A): for Australia  
•(F): for Japan  
•(G): for PX

## 8. ELECTRICAL PARTS LIST (Model PM-54II)

### ASSIGNMENT OF COMMON PARTS CODES.

#### RESISTOR

R\*\*\*: (1) GD05 --- 140, Carbon film fixed resistor,  $\pm 5\%$ , 1/4W  
R\*\*\*: (2) GD05 --- 160, Carbon film fixed resistor,  $\pm 5\%$ , 1/6W

① — Resistance value

#### Examples

① Resistance value

0.1 $\Omega$ ...001	10 $\Omega$ ...100	1k $\Omega$ ...102	100k $\Omega$ ...104
0.5 $\Omega$ ...005	18 $\Omega$ ...180	2.7k $\Omega$ ...272	680k $\Omega$ ...684
1 $\Omega$ ...010	100 $\Omega$ ...101	10k $\Omega$ ...103	1Mk $\Omega$ ...105
6.8 $\Omega$ ...068	390 $\Omega$ ...391	22k $\Omega$ ...223	4.7Mk $\Omega$ ...475

(Note) Please distinguish 1/4W from 1/6W by the shape of parts used actually.

#### C\*\*\*: CERAMIC CAP.

(1) DD1 --- 370, Ceramic condenser  
Disc type  
Temp. coeff. P350 ~ N1000, 50V

① ②  
Capacity value  
Tolerance

#### Examples

① Tolerance (Capacity deviation)

$\pm 0.25\text{pF}$ ...0  
 $\pm 0.5\text{pF}$ ...1  
 $\pm 5\%$ ...5

\* Tolerance of COMMON PARTS handled here are as follows:

0.5pF ~ 5pF... $\pm 0.25\text{pF}$   
6pF ~ 10pF... $\pm 0.5\text{pF}$   
12pF ~ 560pF... $\pm 5\%$

② Capacity value

0.5pF...005	3pF...030	100pF...101
1pF...010	10pF...100	220pF...221
1.5pF...015	47pF...470	560pF...561

#### C\*\*\*: CERAMIC CAP.

(1) DK16 --- 300, High dielectric constant ceramic condenser  
Disc type  
Temp. chara. 2B4, 50V

①  
Capacity value

#### Example

② Capacity value  
100pF...101 1000pF...102 10000pF...103  
470pF...471 2200pF...222

#### C\*\*\*: ELECTROLY. CAP. ( $\frac{\square}{\square}$ ), FILM CAP. ( $\frac{\square}{\square}$ )

(1) EA --- 10, Electrolytic condenser  
One-way lead type, Tolerance  $\pm 20\%$

① ②  
Dielectric strength  
Capacity value

#### Examples

① Capacity value  
0.1 $\mu\text{F}$ ...104 4.7 $\mu\text{F}$ ...475 100 $\mu\text{F}$ ...107  
0.33 $\mu\text{F}$ ...334 10 $\mu\text{F}$ ...106 330 $\mu\text{F}$ ...337  
1 $\mu\text{F}$ ...105 22 $\mu\text{F}$ ...226 1100 $\mu\text{F}$ ...108  
2200 $\mu\text{F}$ ...228

② Working voltage

6.3V...006	25V...025
10V...010	35V...035
16V...016	50V...050

(2) DF15 --- 350, Plastic film condenser  
One-way type, Mylar  $\pm 5\%$  50V

①  
Capacity value

#### Examples

① Capacity value  
0.001 $\mu\text{F}$  (1000pF)...102 0.1 $\mu\text{F}$ ...104  
0.0018 $\mu\text{F}$ ...182 0.56 $\mu\text{F}$ ...564  
0.01 $\mu\text{F}$ ...103 1 $\mu\text{F}$ ...105  
0.015 $\mu\text{F}$ ...153

REF. DESIG.	PART NO.	DESCRIPTION		
P701	YK176H3410 ZZ182H8410 ZZ182H7410	<b>P701-MAIN AMP CIRCUIT BOARD</b> P.W. Board, Main Amp P.W. Board Assembly [N, A] P.W. Board Assembly [E, G]		
CN01	OA47505010	Elect	4.7 $\mu\text{F}$	50V
CN02	OA47405010	Elect	0.47 $\mu\text{F}$	50V
CN04	OA47601010	Elect	47 $\mu\text{F}$	10V
CN05	OA47601010	Elect	47 $\mu\text{F}$	10V
CN81	OA47703510	Elect	470 $\mu\text{F}$	35V
CN82	OA47703510	Elect	470 $\mu\text{F}$	35V
CN83	OA33703510	Elect	330 $\mu\text{F}$	35V
CN84	OA33703510	Elect	330 $\mu\text{F}$	35V
CN85	OA22701610	Elect	220 $\mu\text{F}$	16V
CN86	OA22701610	Elect	220 $\mu\text{F}$	16V
CN89	DK18103560	Ceramic	0.01 $\mu\text{F}$	+80% -20%
CN90	DK18103560	Ceramic	0.01 $\mu\text{F}$	+80% -20%
CN91	EA47603510	Elect	47 $\mu\text{F}$	35V
CN92	EA47603510	Elect	47 $\mu\text{F}$	35V
C701	OF15272010	Film	270pF	$\pm 5\%$
C702	OF15272010	Film	270pF	$\pm 5\%$
C703	OA10605010	Elect	10 $\mu\text{F}$	50V
C704	OA10605010	Elect	10 $\mu\text{F}$	50V
C705	OA22700610	Elect	220 $\mu\text{F}$	6.3V
C706	OA22700610	Elect	220 $\mu\text{F}$	6.3V
C707	OF15152010	Film	1500pF	$\pm 5\%$
C708	OF15152010	Film	1500pF	$\pm 5\%$
C709	DF55221090	Film	220pF	$\pm 5\%$
C710	DF55221090	Film	220pF	$\pm 5\%$
C711	DF31100520	Film	10pF	$\pm 5\%$
C712	DF31100520	Film	10pF	$\pm 5\%$
C713	OA47706310	Elect	470 $\mu\text{F}$	63V
C714	OA47706310	Elect	470 $\mu\text{F}$	63V
C715	OA10701610	Elect	100 $\mu\text{F}$	16V
C716	OA10701610	Elect	100 $\mu\text{F}$	16V
C719	DD11100300	Ceramic	10pF	$\pm 0.5\text{pF}$
C720	DD11100300	Ceramic	10pF	$\pm 0.5\text{pF}$
C725	DK18103310	Ceramic	0.01 $\mu\text{F}$	+80% -20%
C726	DK18103310	Ceramic	0.01 $\mu\text{F}$	+80% -20%
C727	DK18103310	Ceramic	0.01 $\mu\text{F}$	+80% -20%
C728	DK18103310	Ceramic	0.01 $\mu\text{F}$	+80% -20%
C751	DF55151090	Film	150pF	$\pm 5\%$
C752	DF55151090	Film	150pF	$\pm 5\%$
C753	OA10510010	Elect	1 $\mu\text{F}$	100V
C754	OA10510010	Elect	1 $\mu\text{F}$	100V
C755	OF15103010	Film	0.01 $\mu\text{F}$	$\pm 5\%$
RN01	GG05222140	<b>P701-RESISTORS</b> (All Resistors are $\pm 5\%$ and $\frac{1}{2}\text{W}$ )		
RN02	GG05222140	2.2K $\Omega$		
RN03	GG05222140	2.2K $\Omega$		
RN04	GG05222140	2.2K $\Omega$		
RN27	NH05220140	22 $\Omega$ , Fusible [N, A]		
	GG05220140	22 $\Omega$ [E, G]		
RN81	NH05012140	1.2 $\Omega$ , Fusible		
RN82	NH05012140	1.2 $\Omega$ , Fusible		
RN83	NF02100140	10 $\Omega$ $\pm 2\%$ , Fuse		
RN84	NF02100140	10 $\Omega$ $\pm 2\%$ , Fuse		
RN85	GG05100120	10 $\Omega$ $\frac{1}{2}\text{W}$		

REF. DESIG.	PART NO.	DESCRIPTION	
RN86	GG05100120	10 $\Omega$	$\frac{1}{2}$ W
RN90	GA05222010	2.2K $\Omega$	1W
RN91	GA05222010	2.2K $\Omega$	1W
R713	GG05123120	12K $\Omega$	$\frac{1}{2}$ W
R714	GG05123120	12K $\Omega$	$\frac{1}{2}$ W
R719	RA04720750	4.7K $\Omega$ , Trimming	
R720	RA04720750	4.7K $\Omega$ , Trimming	
R721	GG05101140	100 $\Omega$	
R722	GG05101140	100 $\Omega$	
R723	GG05101140	100 $\Omega$	
R724	GG05101140	100 $\Omega$	
R727	GA05181020	180 $\Omega$	2W
R728	GA05181020	180 $\Omega$	2W
R729	NH05022140	2.2 $\Omega$ , Fusible [N, A]	
	GG05022140	2.2 $\Omega$ [E, G]	
R730	GG05022140	2.2 $\Omega$ [E, G]	
	GG05022140	2.2 $\Omega$ [E, G]	
R731	GG05100140	10 $\Omega$	
R732	GG05100140	10 $\Omega$	
R737	BW10000080	0.18 $\Omega$ x2 $\pm$ 10% 5W	
R738	BW10000080	0.18 $\Omega$ x2 $\pm$ 10% 5W	
R747	NF02220140	22 $\Omega$ , Fuse [N, A]	
	GG05220140	22 $\Omega$ [E, G]	
R748	NF02220140	22 $\Omega$ , Fuse [N, A]	
	GG05220140	22 $\Omega$ [E, G]	
R755	GG05047140	4.7 $\Omega$	
R756	GG05047140	4.7 $\Omega$	
<b>P701-SEMICONDUCTORS</b>			
DN01	HD20014010	Diode 1SS81	
DN02	HD20014010	Diode 1SS81	
DN03	HD20014010	Diode 1SS81	
DN04	HD20014010	Diode 1SS81	
DN05	HD20022030	Diode DSF10C	
DN81	HD20022030	Diode DSF10C	
DN88			
D701	HD20014010	Diode 1SS81	
D702	HD20014010	Diode 1SS81	
D703	HD20014010	Diode 1SS81	
D704	HD20014010	Diode 1SS81	
D709	HD20002000	Diode 1SS133, etc.	
D710	HD20002000	Diode 1SS133, etc.	
D751	HD20029100	Diode 30DL2	
D752	HD20029100	Diode 30DL2	
QN01	HT322401A0	Transistor 2SC2240(GR)	
QN02	HT322401A0	Transistor 2SC2240(GR)	
QN03	HT109701A0	Transistor 2SA970(GR)	
QN04	HT109701A0	Transistor 2SA970(GR)	
QN05	HT322401A0	Transistor 2SC2240(GR)	
QN06	HT109701A0	Transistor 2SA970(GR)	
QN07	HC10042050	IC TA7317P	
QN81	HC38515090	IC NJM78M15A	
QN82	HC39515090	IC NJM79M15A	
Q701	HT318151C0	Transistor 2SC1815(GRN)	
Q702	HT318151C0	Transistor 2SC1815(GRN)	
Q707	HT332982D0	Transistor 2SC3298(O, Y)	
Q708	HT332982D0	Transistor 2SC3298(O, Y)	
Q709	HT113062D0	Transistor 2SA1306(O, Y)	
Q710	HT113062D0	Transistor 2SA1306(O, Y)	

REF. DESIG.	PART NO.	DESCRIPTION	
Q711	HT332802A0	Transistor	2SC3280(O, R)
Q712	HT332802A0	Transistor	2SC3280(O, R)
Q713	HT113012A0	Transistor	2SA1301(O, R)
Q714	HT113012A0	Transistor	2SA1301(O, R)
Q719	HC10204030	IC	STK-3062MARK3
Q751	HT322401A0	Transistor	2SC2240(GR)
Q752	HT109701A0	Transistor	2SA970(GR)
Q753	HT109701A0	Transistor	2SA970(GR)
Q754	HT322401A0	Transistor	2SC2240(GR)
Q755	HT329832A0	Transistor	2SC2983(O, Y)
Q756	HT112252A0	Transistor	2SA1225(O, Y)
Q757	HT209222A0	Transistor	2SB922(R, Q)
Q758	HT412382A0	Transistor	2SD1238(O, R)
<b>P701-MISCELLANEOUS</b>			
JN81	YJ06002440	Jack, 4P	
JN82	YJ06002430	Jack, 3P	
JN83	YJ06002430	Jack, 3P	
J701	YP06003440	Plug, 4P	
WN81	YU03520260	Jumper Lead, 3P	
<b>P801-DIODE BRIDGE CIRCUIT BOARD</b>			
P801	YK176H1430	P.W. Board, Diode Bridge	
	ZZ182H1430	P.W. Board Assembly	
C805	DK18103560	Ceramic Cap. 0.01 $\mu$ F	+80% -20%
C806	DK18103560	Ceramic Cap. 0.01 $\mu$ F	+80% -20%
$\Delta$ D801	HD20030100	Diode	30D-2
$\Delta$ D808			
J801	YP06000580	Plug, 5P	
J802	YP07001600	Plug, 10P	
<b>P851-POWER SUPPLY CIRCUIT BOARD</b>			
P851	YK176H1440	P.W. Board, Power Supply	
	ZZ182H1440	P.W. Board Assembly	
$\Delta$ C851	EB10905620	Elect Cap. 10000 $\mu$ F	56V
$\Delta$ C852	EB10905620	Elect Cap. 10000 $\mu$ F	56V
$\Delta$ C853	EB68804080	Elect Cap. 6800 $\mu$ F	40V
$\Delta$ C854	EB68804080	Elect Cap. 6800 $\mu$ F	40V
<b>P901-POWER SWITCH CIRCUIT BOARD</b>			
P901	YK176H2860	P.W. Board, Power Switch	
	ZZ176H8860	P.W. Board Assembly	
$\Delta$ C901	DK18103840	Ceramic Cap. 0.01 $\mu$ F	250V
$\Delta$ S901	SP01011100	Push Switch, Power	

REF. DESIG.	PART NO.	DESCRIPTION
PE01	YK176H2820 ZZ176H8820	<b>PE01-TONE VOLUME CIRCUIT BOARD</b> P.W. Board, Tone Volume P.W. Board Assembly
		<b>PE01-CAPACITORS</b>
CE03	DF55271090	Film 270pF $\pm 5\%$
CE04	DF55271090	Film 270pF $\pm 5\%$
CE05	DF35560520	Mica 56pF $\pm 5\%$
CE06	DF35560520	Mica 56pF $\pm 5\%$
CE07	OA22700610	Elect 220 $\mu$ F 6.3V
CE08	OA22700610	Elect 220 $\mu$ F 6.3V
CE09	DF35390520	Mica 39pF $\pm 5\%$
CE10	DF35390520	Mica 39pF $\pm 5\%$
CE11	OF15153010	Film 0.015 $\mu$ F $\pm 5\%$
CE12	OF15153010	Film 0.015 $\mu$ F $\pm 5\%$
CE13	OA10405010	Elect 0.1 $\mu$ F 50V
CE14	OA10405010	Elect 0.1 $\mu$ F 50V
CE15	OF15393010	Film 0.039 $\mu$ F $\pm 5\%$
CE16	OF15393010	Film 0.039 $\mu$ F $\pm 5\%$
CE17	OA47405010	Elect 0.47 $\mu$ F 50V
CE18	OA47405010	Elect 0.47 $\mu$ F 50V
CE19	OA47601010	Elect 47 $\mu$ F 10V
CE20	OA47601010	Elect 47 $\mu$ F 10V
CE21	OA22601610	Elect 22 $\mu$ F 16V
CE22	OA22601610	Elect 22 $\mu$ F 16V
CE23	OF15332010	Film 3300pF $\pm 5\%$
CE24	OF15332010	Film 3300pF $\pm 5\%$
CE25	OA10701610	Elect 100 $\mu$ F 16V
CE26	OA10701610	Elect 100 $\mu$ F 16V
CE27	OA10701610	Elect 100 $\mu$ F 16V
CE28	OA10701610	Elect 100 $\mu$ F 16V
CE31	DF15222350	Film 2200pF $\pm 5\%$
CE32	DF15222350	Film 2200pF $\pm 5\%$
		<b>PE01-RESISTORS</b>
RE37	RM01030310	10K $\Omega$ (C), Variable
RE38	RM01030310	10K $\Omega$ (C), Variable
RE39	NF02470140	47 $\Omega$ $\pm 5\%$ 1/4W, Fuse
RE40	NF02470140	47 $\Omega$ $\pm 5\%$ 1/4W, Fuse
		<b>PE01-SEMICONDUCTORS</b>
QE01	HF203691B0	F.E.T. 2SK369(BL)
QE02	HF203691B0	F.E.T. 2SK369
QE03	HF203691B0	F.E.T. 2SK369
QE04	HF203691B0	F.E.T. 2SK369
QE05	HC10026090	IC NJM2041DD
		<b>PE01-MISCELLANEOUS</b>
JE01	YP06003440	Plug, 4P
WE01	YB00280360	Connective Cord, 4P
WE02	YU03360260	Jumper Lead, 3P
WE05	YU03360260	Jumper Lead, 3P
		<b>PE51-TONE DEFEAT SWITCH CIRCUIT BOARD</b>
PE51	YK176H2880 ZZ176H8880	P.W. Board, Tone Defeat Switch P.W. Board Assembly
SE51	SP02011420	Push Switch, Tone Defeat

REF. DESIG.	PART NO.	DESCRIPTION
PG51	YK176H2840 ZZ176H8840	<b>PG51-BALANCE VOLUME CIRCUIT BOARD</b> P.W. Board, Balance Volume P.W. Board Assembly
RG51	RM01040890	Variable Resistor 100K $\Omega$ (MN)
		<b>PJ01-TAPE MONITOR CIRCUIT BOARD</b>
PJ01	YK176H1420 ZZ176H1420	P.W. Board, Tape Monitor P.W. Board Assembly
CJ01 CJ06 CJ08	DK18103310	Ceramic Cap. 0.01 $\mu$ F +80% -20%
	DK18103310	Ceramic Cap. 0.01 $\mu$ F +80% -20%
JJ01 JJ02 JJ03 JJ04	YT02040690 YT02040690 YJ06002460 YJ06002460	Terminal, 4P; RCA Terminal, 4P; RCA Jack, 7P Jack, 7P
		<b>PS01-VOLUME/PUSH SWITCH CIRCUIT BOARD</b>
PS01	YK176H2810 ZZ176H8810	P.W. Board, Volume/Push Switch P.W. Board Assembly
CS01 CS02	OF15102010 OF15102010	Ceramic Cap. 1000pF 50V Ceramic Cap. 1000pF 50V
RS07 RS10	GA05122010 RM05031250	Resistor 1.2K $\Omega$ $\pm 5\%$ 1W Variable Resistor 50K $\Omega$ (B)
SS01 SS02 SS03	SP04030360 SP04020500 SP04010520	Push Switch Push Switch Push Switch
WS01 WS02 WS03 WS04 WS05 WS06 WS07 WS09 WS10 WS11	YU06140260 YU07380260 YU07360260 YU04180260 YU04080260 YU06120260 YU04120260 YB00370060 YB00370070 YB00280360	Jumper Lead, 6P Jumper Lead, 7P Jumper Lead, 7P Jumper Lead, 4P Jumper Lead, 4P Jumper Lead, 6P Jumper Lead, 4P Connective Cord, 3P Connective Cord, 3P Connective Cord, 4P
PU01	YK176H3440 ZZ182H8440	<b>PU01-AVSS CIRCUIT BOARD</b> P.W. Board, AVSS P.W. Board Assembly
		<b>PU01-CAPACITORS</b>
CU05 CU06 CU07 CU08	OA10601610 OA10601610 OA10601610 OA10601610	Elect 10 $\mu$ F 16V Elect 10 $\mu$ F 16V Elect 10 $\mu$ F 16V Elect 10 $\mu$ F 16V
		<b>PU01-SEMICONDUCTORS</b>
DU01 DU02 DU03 DU04 DU05	HD20002000 HD20002000 HD20002000 HD20002000 HD20002000	Diode 1SS133, etc. Diode 1SS133, etc. Diode 1SS133, etc. Diode 1SS133, etc. Diode 1SS133, etc.
QU01 QU02	HC10022090 HC712301A0	IC NJM2903D IC 74LS123P

REF. DESIG.	PART NO.	DESCRIPTION
JU01 JU02	YP07001610 YP07001520	<b>PU01-MISCELLANEOUS</b> Plug, 11P Plug, 2P
PV01	YK176H1410 ZZ176H1410	<b>PV01-PHONE INPUT SELECTOR CIRCUIT BOARD</b> P.W. Board, Phone Input Selector P.W. Board Assembly
C401 C402 C403 C404 C405 C406 C407 C408 C409 C410	DF55101510 DF55101510 DF55681510 DF55681510 OA10800610 OA10800610 OF15473010 OF15473010 OF15103010 OF15103010	<b>PV01-CAPACITORS</b> Film 100pF $\pm 5\%$ Film 100pF $\pm 5\%$ Film 680pF $\pm 5\%$ Film 680pF $\pm 5\%$ Elect 1000 $\mu$ F 6.3V Elect 1000 $\mu$ F 6.3V Film 0.047 $\mu$ F $\pm 5\%$ Film 0.047 $\mu$ F $\pm 5\%$ Film 0.01 $\mu$ F $\pm 5\%$ Film 0.01 $\mu$ F $\pm 5\%$
C411 C412 C413 C414 C415 C416 C417 C418 C419 C420	OF15332010 OF15332010 OA10505010 OA10505010 OF15392010 OF15392010 OA47701610 OA47701610 DK18103310 DK18103310	Film 3300pF $\pm 5\%$ Film 3300pF $\pm 5\%$ Elect 1 $\mu$ F 50V Elect 1 $\mu$ F 50V Film 3900pF $\pm 5\%$ Film 3900pF $\pm 5\%$ Elect 470 $\mu$ F 16V Elect 470 $\mu$ F 16V Ceramic 0.01 $\mu$ F +80% -20% Ceramic 0.01 $\mu$ F +80% -20%
CV01 } CV08	DK18103310	Ceramic 0.01 $\mu$ F +80% -20%
R429 R430	NF02470140 NF02470140	<b>PV01-RESISTORS</b> 47 $\Omega$ $\pm 1\%$ $\frac{1}{4}$ W, Fuse 47 $\Omega$ $\pm 1\%$ $\frac{1}{4}$ W, Fuse
DV01 DV02 Q401	HD20001000 HD20001000 HF203691B0	<b>PV01-SEMICONDUCTORS</b> Diode 1S1555, etc. Diode 1S1555, etc. F.E.T. 2SK369(BL)
Q404 Q405	HC10026090	IC NJM2041DD
J401 J402 J403	YP06003330 YP06003330 YT02020610	<b>PV01-MISCELLANEOUS</b> Plug, 3P Plug, 3P Terminal, 2P; RCA
JV01 JV02 JV03 JV04 JV05 JV06 LV01 LV02 SV01 WV01 WV02	YT02020260 YT02060280 YJ06002390 YJ06002430 YJ06002440 YJ06002450 LY20240230 LY20240230 SS040600200 YU06140260 YU06120260	Terminal, 2P; RCA Terminal, 6P; RCA Jack, 5P Jack, 3P Jack, 4P Jack, 6P Relay, CD Direct Relay, Phono Direct Slide Switch Jumper Lead, 6P Jumper Lead, 6P

REF. DESIG.	PART NO.	DESCRIPTION
PW01	YK176H3420 ZZ182H8420	<b>PW01-SPEAKER PROTECTOR RELAY CIRCUIT BOARD</b> P.W. Board, Speaker Protector Relay P.W. Board Assembly
CW01 CW02 CW03 CW04	OF15224010 OF15224010 OF15224010 OF15224010	<b>PW01-CAPACITORS</b> Film 0.22 $\mu$ F $\pm 5\%$ Film 0.22 $\mu$ F $\pm 5\%$ Film 0.22 $\mu$ F $\pm 5\%$ Film 0.22 $\mu$ F $\pm 5\%$
RW01 RW02 RW03 RW04	GG05022120 GG05022120 GA05100030 GA05100030	<b>PW01-RESISTORS</b> 2.2 $\Omega$ $\pm 5\%$ $\frac{1}{4}$ W 2.2 $\Omega$ $\pm 5\%$ $\frac{1}{4}$ W 10 $\Omega$ $\pm 5\%$ 3W 10 $\Omega$ $\pm 5\%$ 3W
DW01 DW02	HD20002000 HD20002000	<b>PW01-SEMICONDUCTORS</b> Diode 1SS133, etc. Diode 1SS133, etc.
JW01 JW02 JW03	YT01040310 YT01040320 YJ07001100	<b>PW01-MISCELLANEOUS</b> Terminal, Speaker Terminal, Speaker Jack, 5P
LW01 LW02 LW03 LW04	LL23905120 LL23905120 LY20240260 LY20240260	Choke Coil Choke Coil Relay, Speaker Relay, Speaker
PW51	YK176H3430 ZZ182H8430	<b>PW51-SPEAKER SWITCH/PHONE CIRCUIT BOARD</b> P.W. Board, Speaker Switch/Phone P.W. Board Assembly
RW51 RW52	GA05122010 GA05122010	Resistor 1.2K $\Omega$ $\pm 5\%$ 1W Resistor 1.2K $\Omega$ $\pm 5\%$ 1W
JW51 SW51 WW51 WW52	YJ01002340 SP02020940 YU02320260 YU05360260	Jack, Headphone Push Switch, Speaker Jumper Lead, 2P Jumper Lead, 5P
PY01	YK176H2830 ZZ176H8830	<b>PY01-INPUT SELECTOR DISPLAY CIRCUIT BOARD</b> P.W. Board, Input Selector Display P.W. Board Assembly
DY01 } DY07 DY08	HI10028320 HI10038030	L.E.D. GL9HD4 L.E.D. SLP281F-50U
JY01 JY02 WY01 WY02	YJ07001090 YJ06002440 YU04400260 YU05160260	Jack, 4P Jack, 4P Jumper Lead, 4P Jumper Lead, 5P

**NOTE ON SAFETY :**

Symbol  $\triangle$  Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol  $\triangle$ . Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

(W01-99) (T01-99) (X01-00)	Assembly and Wiring Adjustment Correction
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# ASSIGNMENT OF COMMON PARTS CODES.

## RESISTOR

R\*\*\*: (1) GD05 --- 140, Carbon film fixed resistor,  $\pm 5\%$ , 1/4W  
R\*\*\*: (2) GD05 --- 160, Carbon film fixed resistor,  $\pm 5\%$ , 1/6W

① — Resistance value

## Examples

① Resistance value  
0.1 $\Omega$ ...001 10 $\Omega$ ...100 1k $\Omega$ ...102 100k $\Omega$ ...104  
0.5 $\Omega$ ...005 18 $\Omega$ ...180 2.7k $\Omega$ ...272 680k $\Omega$ ...684  
1 $\Omega$ ...010 100 $\Omega$ ...101 10k $\Omega$ ...103 1Mk $\Omega$ ...105  
6.8 $\Omega$ ...068 390 $\Omega$ ...391 22k $\Omega$ ...223 4.7Mk $\Omega$ ...475

(Note) Please distinguish 1/4W from 1/6W by the shape of parts used actually.

## C\*\*\*: CERAMIC CAP.

(1) DD1 --- 370, Ceramic condenser  
① ② Disc type  
Temp. coeff. P350 ~ N1000, 50V  
Capacity value  
Tolerance

## Examples

① Tolerance (Capacity deviation)  
 $\pm 0.25\text{pF}$ ...0  
 $\pm 0.5\text{pF}$ ...1  
 $\pm 5\%$ ...5

\* Tolerance of COMMON PARTS handled here are as follows:

0.5pF ~ 5pF... $\pm 0.25\text{pF}$   
6pF ~ 10pF... $\pm 0.5\text{pF}$   
12pF ~ 560pF... $\pm 5\%$

② Capacity value  
0.5pF...005 3pF...030 100pF...101  
1pF...010 10pF...100 220pF...221  
1.5pF...015 47pF...470 560pF...561

## C\*\*\*: CERAMIC CAP.

(1) DK16 --- 300, High dielectric constant ceramic condenser  
① Disc type  
Temp. chara. 2B4, 50V  
Capacity value

## Example

② Capacity value  
100pF...101 1000pF...102 10000pF...103  
470pF...471 2200pF...222

## C\*\*\*: ELECTROLY CAP. ( $\text{E}$ ), FILM CAP. ( $\text{F}$ )

(1) EA --- 10, Electrolytic condenser  
① ② One-way lead type, Tolerance  $\pm 20\%$   
Dielectric strength  
Capacity value

## Examples

① Capacity value  
0.1 $\mu\text{F}$ ...104 4.7 $\mu\text{F}$ ...475 100 $\mu\text{F}$ ...107  
0.33 $\mu\text{F}$ ...334 10 $\mu\text{F}$ ...106 330 $\mu\text{F}$ ...337  
1 $\mu\text{F}$ ...105 22 $\mu\text{F}$ ...226 1100 $\mu\text{F}$ ...108  
2200 $\mu\text{F}$ ...228

② Working voltage  
6.3V...006 25V...025  
10V...010 35V...035  
16V...016 50V...050

(2) DF15 --- 350, Plastic film condenser  
① One-way type, Mylar  $\pm 5\%$  50V  
Capacity value

## Examples

① Capacity value  
0.001 $\mu\text{F}$  (1000pF)...102 0.1 $\mu\text{F}$ ...104  
0.0018 $\mu\text{F}$ ...182 0.56 $\mu\text{F}$ ...564  
0.01 $\mu\text{F}$ ...103 1 $\mu\text{F}$ ...105  
0.015 $\mu\text{F}$ ...153

(Model PM-64II)

REF. DESIG.	PART NO.	DESCRIPTION
P701	YK176H3410 ZZ175H8410 ZZ175H7410	<b>P701-MAIN AMP CIRCUIT BOARD</b> P.W. Board, Main Amp P.W. Board Assembly [N, A] P.W. Board Assembly [E, G]
CN01	OA47505010	<b>P701-CAPACITORS</b> Elect 4.7 $\mu\text{F}$ 50V
CN02	OA47505010	Elect 4.7 $\mu\text{F}$ 50V
CN04	OA22601610	Elect 22 $\mu\text{F}$ 16V
CN05	OA22601610	Elect 22 $\mu\text{F}$ 16V
CN81	OA47703510	Elect 470 $\mu\text{F}$ 35V
CN82	OA47703510	Elect 470 $\mu\text{F}$ 35V
CN83	OA33703510	Elect 330 $\mu\text{F}$ 35V
CN84	OA33703510	Elect 330 $\mu\text{F}$ 35V
CN85	OA22701610	Elect 220 $\mu\text{F}$ 16V
CN86	OA22701610	Elect 220 $\mu\text{F}$ 16V
CN89	DK18103560	Ceramic 0.01 $\mu\text{F}$ [N, A]
CN90	DK18103560	Ceramic 0.01 $\mu\text{F}$ [N, A]
C701	OF15272010	Film 2700pF $\pm 5\%$
C702	OF15272010	Film 2700pF $\pm 5\%$
C703	OA10605010	Elect 10 $\mu\text{F}$ 50V
C704	OA10605010	Elect 10 $\mu\text{F}$ 50V
C705	OA22700610	Elect 220 $\mu\text{F}$ 6.3V
C706	OA22700610	Elect 220 $\mu\text{F}$ 6.3V
C707	OF15152010	Film 1500pF $\pm 5\%$
C708	OF15152010	Film 1500pF $\pm 5\%$
C709	DF55221510	Film 220pF $\pm 5\%$
C710	DF55221510	Film 220pF $\pm 5\%$
C711	DF35120520	Mica 12pF $\pm 5\%$
C712	DF35120520	Mica 12pF $\pm 5\%$
C713	OA22710010	Elect 220 $\mu\text{F}$ 100V
C714	OA22710010	Elect 220 $\mu\text{F}$ 100V
C715	OA10701610	Elect 100 $\mu\text{F}$ 16V
C716	OA10701610	Elect 100 $\mu\text{F}$ 16V
C717	DF35101520	Mica 100pF $\pm 5\%$
C718	DF35101520	Mica 100pF $\pm 5\%$
C719	DF31100520	Mica 10pF $\pm 0.5\text{pF}$
C720	DF31100520	Mica 10pF $\pm 5\%$
C751	DF55151090	Film 150pF $\pm 5\%$
C752	DF55151090	Film 150pF $\pm 5\%$
C753	OA10510010	Elect 1 $\mu\text{F}$ 100V
C754	OA10510010	Elect 1 $\mu\text{F}$ 100V
C755	OF15103010	Film 0.01 $\mu\text{F}$ $\pm 5\%$
C756	OA33706310	Elect 330 $\mu\text{F}$ 63V
C757	OA33706310	Elect 330 $\mu\text{F}$ 63V
RN01	GG05102140	<b>P701-RESISTORS</b> (All Resistors are $\pm 5\%$ and $\frac{1}{4}\text{W}$ ) 1K $\Omega$
RN02	GG05102140	1K $\Omega$
RN03	GG05102140	1K $\Omega$
RN04	GG05102140	1K $\Omega$
RN27	GG05220140	22 $\Omega$ [E, G]
	NF02220140	22 $\Omega$ , Fuse $\pm 2\%$ [N, A]
RN81	NH05012140	1.2 $\Omega$ , Fusible
RN82	NH05012140	1.2 $\Omega$ , Fusible
RN83	GG05100120	10 $\Omega$ $\frac{1}{4}\text{W}$
RN84	GG05100120	10 $\Omega$ $\frac{1}{4}\text{W}$
RN85	NF02100140	10 $\Omega$ , Fuse

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REF. DESIG.	PART NO.	DESCRIPTION
RN86	NF02100140	10Ω, Fuse
RN89	GA05560010	56Ω 1W [E, G, F]
RN90	GA05222010	2.2KΩ 1W
RN91	GA05222010	2.2KΩ 1W
R707	NF02821140	820Ω, Fuse ±2% [N, A]
R708	NF02821140	820Ω, Fuse ±2% [N, A]
R713	GG05153120	15KΩ ½W
R714	GG05153120	15KΩ ½W
R719	RA04710750	470Ω, Trimming
R720	RA04710750	470Ω, Trimming
R721	GG05181140	180Ω
R722	GG05181140	180Ω
R723	GG05181140	180Ω
R724	GG05181140	180Ω
R725	GG05122140	1.2KΩ
R726	GG05122140	1.2KΩ
R727	GA05181020	180Ω 2W
R728	GA05181020	180Ω 2W
R729	GG05100140	10Ω
R736		
R737	BW10000080	0.18Ωx2 ±10% 5W
R738	BW10000080	0.18Ωx2 ±10% 5W
R739	BW10000080	0.18Ωx2 ±10% 5W
R740	BW10000080	0.18Ωx2 ±10% 5W
R741	GG05220140	22Ω
R742	GG05220140	22Ω
R755	GG05047140	4.7Ω
R756	GG05047140	4.7Ω
<b>P701-SEMICONDUCTORS</b>		
DN01	HD20014010	Diode 1SS81
DN02	HD20014010	Diode 1SS81
DN03	HD20014010	Diode 1SS81
DN04	HD20014010	Diode 1SS81
DN05	HD20022030	Diode DSF10C
DN81		
DN88	HD20022030	Diode DSF10C
D701	HD20014010	Diode 1SS81
D702	HD20014010	Diode 1SS81
D703	HD20014010	Diode 1SS81
D704	HD20014010	Diode 1SS81
D705		
D710	HD20002000	Diode 1SS133; etc.
D711	HD30001020	Zener MA1033M
D712	HD30001020	Zener MA1033M
D713	HD30001020	Zener MA1033M
D714	HD30001020	Zener MA1033M
D751	HD20027100	Diode 30DF-2
D752	HD20027100	Diode 30DF-2
QN01	HT322401A0	Transistor 2SC2240(GR)
QN02	HT322401A0	Transistor 2SC2240(GR)
QN03	HT109701A0	Transistor 2SA970(GR)
QN04	HT109701A0	Transistor 2SA970(GR)
QN05	HT322401A0	Transistor 2SC2240(GR)
QN06	HT109701A0	Transistor 2SA970(GR)
QN07	HC10042050	IC TA7317P
QN81	HC38515090	IC NJM78M15A
QN82	HC39515090	IC NJM79M15A

REF. DESIG.	PART NO.	DESCRIPTION
Q701	HT339640A0	Transistor 2SC3964
Q702	HT339640A0	Transistor 2SC3964
Q703	HT322292A0	Transistor 2SC2229(O, Y)
Q704	HT322292A0	Transistor 2SC2229(O, Y)
Q705	HT109492A0	Transistor 2SA949(O, Y)
Q706	HT109492A0	Transistor 2SA949(O, Y)
Q707	HT332982D0	Transistor 2SC3298(O, Y)
Q708	HT332982D0	Transistor 2SC3298(O, Y)
Q709	HT113062D0	Transistor 2SA1306(O, Y)
Q710	HT113062D0	Transistor 2SA1306(O, Y)
Q711	HT331822A0	Transistor 2SC3182(O, R)
Q712	HT331822A0	Transistor 2SC3182(O, R)
Q713	HT112652A0	Transistor 2SA1265(O, R)
Q714	HT112652A0	Transistor 2SA1265(O, R)
Q715	HT331822A0	Transistor 2SC3182(O, R)
Q716	HT331822A0	Transistor 2SC3182(O, R)
Q717	HT112652A0	Transistor 2SA1265(O, R)
Q718	HT112652A0	Transistor 2SA1265(O, R)
Q719	HC10181030	IC STK-3102MARK3
Q751	HT322401A0	Transistor 2SC2240(GR)
Q752	HT109701A0	Transistor 2SA970(GR)
Q753	HT109701A0	Transistor 2SA970(GR)
Q754	HT322401A0	Transistor 2SC2240(GR)
Q755	HT329832A0	Transistor 2SC2983(O, Y)
Q756	HT112252A0	Transistor 2SA1225(O, Y)
Q757	HT113862A0	Transistor 2SA1386(R, Q)
Q758	HT335192A0	Transistor 2SC3519(O, R, Y)
<b>P701-MISCELLANEOUS</b>		
JN81	YJ06002440	Jack, 4P
JN82	YJ06002430	Jack, 3P
JN83	YJ06002430	Jack, 3P
J701	YP06003440	Plug, 4P
J751	176H005010	Clamper, Wire
J752	176H005010	Clamper, Wire
J754	176H005010	Clamper, Wire
J756	176H005010	Clamper, Wire
J758	176H005010	Clamper, Wire
J759	176H005010	Clamper, Wire
WN81	YU03520260	Jumper Lead, 3P
WV03	YU03580260	Jumper Lead, 3P
<b>P801-DIODE BRIDGE CIRCUIT BOARD</b>		
P801	YK176H1430	P.W. Board, Diode Bridge
	ZZ175H1430	P.W. Board Assembly
C805	DK18103560	Ceramic Cap. 0.01μF +80% -20% (PM-64MKII)
C806	DK18103560	Ceramic Cap. 0.01μF +80% -20% (PM-64MKII)
Δ D801		
Δ D804	HD20033030	Diode DS303C
Δ D805		
Δ D808	HD20030100	Diode 30D-2
J801	YP06000580	Plug, 5P
J802	YP07001600	Plug, 10P



REF. DESIG.	PART NO.	DESCRIPTION
P851	YK176H1440 ZZ175H1440	<b>P851-POWER SUPPLY CIRCUIT BOARD</b> P.W. Board, Power Supply P.W. Board Assembly
△ C851	EB12906310	Elect Cap. 12000μF 63V
△ C852	EB12906310	Elect Cap. 12000μF 63V
△ C853	EB82804010	Elect Cap. 8200μF 40V
△ C854	EB82804010	Elect Cap. 8200μF 40V
PE01	YK175H1060 ZZ175H8060	<b>PE01-TONE VOLUME(L) CIRCUIT BOARD</b> P.W. Board, Tone Volume(L) P.W. Board Assembly
CE11	OF15153010	Film 0.015μF ±5%
CE13	OA10405010	Elect 0.1μF 50V
CE15	OF15393010	Film 0.039μF ±5%
CE17	OA47405010	Elect 0.47μF 50V
CE19	OA47601010	Elect 47μF 10V
RE41	RK01030630	Variable Resistor 10KΩ(C), Treble
RE42	RK01030630	Variable Resistor 10KΩ(C), Bass
WE05	YB00220230	Connective Cord, 3P
PE02	YK175H1070 ZZ175H8070	<b>PE02-TONE VOLUME(R) CIRCUIT BOARD</b> P.W. Board, Tone Volume(R) P.W. Board Assembly
CE12	OF15153010	Film Cap. 0.015μF ±5%
CE14	OA10405010	Elect Cap. 0.1μF 50V
CE16	OF15393010	Film Cap. 0.039μF ±5%
CE18	OA47405010	Elect Cap. 0.47μF 50V
CE20	OA47601010	Elect Cap. 47μF 10V
RE37	RK01030630	Variable Resistor 10KΩ(C), Treble
RE38	RK01030630	Variable Resistor 10KΩ(C), Bass
WE06	YB00160260	Connective Cord, 3P
PE50	YK175H1020 ZZ175H8020	<b>PE50-TONE UNIT CIRCUIT BOARD</b> P.W. Board, Tone Unit P.W. Board Assembly
CE01	DF35220520	Mica 22pF ±5%
CE02	DF35220520	Mica 22pF ±5%
CE03	OF15182010	Film 1800pF ±5%
CE04	OF15182010	Film 1800pF ±5%
CE05	DF35560520	Mica 56pF ±5%
CE06	DF35560520	Mica 56pF ±5%
CE07	OA22700610	Elect 220μF 6.3V
CE08	OA22700610	Elect 220μF 6.3V
CE09	DF35101520	Mica 100pF ±5%
CE10	DF35101520	Mica 100pF ±5%
CE21	OA22601610	Elect 22μF 16V
CE22	OA22601610	Elect 22μF 16V
CE23	OF15332010	Film 3300pF ±5%
CE24	OF15332010	Film 3300pF ±5%
CE25	OA22701610	Elect 220μF 16V
CE26	OA22701610	Elect 220μF 16V
CE27	OA22701610	Elect 220μF 16V
CE28	OA22701610	Elect 220μF 16V

REF. DESIG.	PART NO.	DESCRIPTION
RE39	NF02100140	<b>PE50-RESISTORS</b> 10Ω ±5% ¼W, Fuse
RE40	NF02100140	10Ω ±5% ¼W, Fuse
DE01	HD60001160	<b>PE50-SEMICONDUCTORS</b> C.R. Diode E-452
DE02	HD60001160	C.R. Diode E-452
QE01	HF203691B0	F.E.T. 2SK369(BL)
QE02	HF203691B0	F.E.T. 2SK369(BL)
QE03	HF203691B0	F.E.T. 2SK369(BL)
QE04	HF203691B0	F.E.T. 2SK369(BL)
QE05	HC10026090	IC NJM2041DD
JE02	YJ06002440	<b>PE50-MISCELLANEOUS</b> Jack, 4P
JE03	YP06003440	Plug, 4P
JE04	YP06003440	Plug, 4P
JE05	YP06003330	Plug, 3P
JE06	YP06003330	Plug, 3P
WE01	YB00280360	Connective Cord, 2P
PE51	YK175H1090 ZZ175H8090	<b>PE51-TONE DEFEAT SWITCH CIRCUIT BOARD</b> P.W. Board, Tone Defeat Switch P.W. Board Assembly
SE51	SP02011420	Push Switch, Tone Defeat
WE03	YB00240150	Connective Cord, 4P
WE04	YB00260220	Connective Cord, 4P
PJ01	YK176H1420 ZZ176H1420	<b>PJ01-TAPE MONITOR CIRCUIT BOARD</b> P.W. Board, Tape Monitor P.W. Board Assembly
CJ01 ?	DK18103310	Ceramic Cap. 0.01μF +80% -20%
CJ08		
JJ01	YT02040690	Terminal, 4P; RCA
JJ02	YT02040690	Terminal, 4P; RCA
JJ03	YJ06002460	Jack, 7P
JJ04	YJ06002460	Jack, 7P
PP01	YK175H1080	<b>PP01-FUSE/AC OUTLET CIRCUIT BOARD(PM-74D)</b> P.W. Board, Fuse/AC Outlet
△ F001	FS10800600	Fuse 8A 250V [F]
JP01	YJ08000170	Jack, Fuse Clip [F]
JP02	YJ08000170	Jack, Fuse Clip [F]
JP03	YP06003400	Plug, 2P [F]

REF. DESIG.	PART NO.	DESCRIPTION
<b>PS01-VOLUME/PUSH SWITCH CIRCUIT BOARD</b>		
PS01	YK175H1010 ZZ175H8010	P.W. Board, Volume/Push Switch P.W. Board Assembly
CS03	OA10405010	Elect Cap. 0.1 $\mu$ F 50V
CS04	OA10405010	Elect Cap. 0.1 $\mu$ F 50V
RS07	GA05122010	Resistor 1.2K $\Omega$ $\pm$ 5% 1W
RS11	RM01040940	Variable Resistor 100K $\Omega$ (MN)
SS01	SP04030380	Push Switch
SS02	SP04030370	Push Switch
SS03	SP04010520	Push Switch
WJ03	YU07480260	Jumper Lead, 7P
WJ04	YU07400260	Jumper Lead, 7P
WS01	YB00201370	Connective Cord, 3P
WS02	YB00201360	Connective Cord, 3P
WS03	YB00250380	Connective Cord, 2P
WS04	YB00250390	Connective Cord, 2P
WS05	YU04120260	Jumper Lead, 4P
WV05	YU04220260	Jumper Lead, 4P
WV06	YU06140260	Jumper Lead, 6P
WV07	YU04280260	Jumper Lead, 4P
WY03	YU04090260	Jumper Lead, 4P
<b>PS02-MASTER VOLUME CIRCUIT BOARD</b>		
PS02	YK175H10A0 ZZ175H80A0	P.W. Board, Master Volume P.W. Board Assembly
CS01	OF15102010	Film Cap. 1000pF $\pm$ 5%
CS02	OF15102010	Film Cap. 1000pF $\pm$ 5%
RS10	RM05031270	Variable Resistor 50K $\Omega$ (B)
JS01	YP06003410	Plug, 2P
JS02	YP06003410	Plug, 2P
WE02	YU04070260	Jumper Lead, 4P
<b>PU01-AVSS CIRCUIT BOARD</b>		
PU01	YK175H1040 ZZ175H8040	P.W. Board, AVSS P.W. Board Assembly
<b>PU01-CAPACITORS</b>		
CU03	OA10601610	Elect 10 $\mu$ F 16V
CU04	OA10601610	Elect 10 $\mu$ F 16V
CU07	OA10601610	Elect 10 $\mu$ F 16V
CU08	OA10601610	Elect 10 $\mu$ F 16V
CU09	OA10601610	Elect 10 $\mu$ F 16V
CU14	OA10601610	Elect 10 $\mu$ F 16V
<b>PU01-RESISTORS</b>		
RU21	GG05221120	220 $\Omega$ $\pm$ 5% $\frac{1}{2}$ W
RU33	RA01030760	10K $\Omega$ , Trimming
RU34	RA01030760	10K $\Omega$ , Trimming
RU35	RA01030760	10K $\Omega$ , Trimming
RU36	RA01030760	10K $\Omega$ , Trimming

REF. DESIG.	PART NO.	DESCRIPTION		
PU01-SEMICONDUCTORS				
DU01	HD20011050	Diode	1S1555	
DU02	HD20011050	Diode	1S1555	
DU03	HD20011050	Diode	1S1555	
DU04	HD20011050	Diode	1S1555	
DU05	HD30001020	Zener	MA1033	
DU06	HD30001020	Zener	MA1033	
DU07	HD30004020	Zener	MA1051	
DU08	HD20002000	Diode	1SS133, etc.	
DU09	HD20002000	Diode	1SS133, etc.	
QU01	HC10009090	IC	NJM2901	
QU02	HC712301A0	IC	74LS123P	
QU03	HW10005320	Photo Unit	PC847	
QU04	HT327852C0	Transistor	2SC2785(HF, FF)	
QU05	HT327852C0	Transistor	2SC2785(HF, FF)	
PU01-MISCELLANEOUS				
JU01	YP07001610	Plug, 11P		
JU02	YP07001520	Plug, 2P		
PV01-PHONE INPUT SELECTOR CIRCUIT BOARD				
PV01	YK176H1410 ZZ175H1410	P.W. Board, Phone Input Selector P.W. Board Assembly		
PV01-CAPACITORS				
C401	DF55101510	Film	100pF	±5%
C402	DF55101510	Film	100pF	±5%
C403	DF55681510	Film	680pF	±5%
C404	DF55681510	Film	680pF	±5%
C405	OA22800610	Elect	2200µF	6.3V
C406	OA22800610	Elect	2200µF	6.3V
C407	OF15473010	Film	0.047µF	±5%
C408	OF15473010	Film	0.047µF	±5%
C409	OF15103010	Film	0.01µF	±5%
C410	OF15103010	Film	0.01µF	±5%
C411	OF15332010	Film	3300pF	±5%
C412	OF15332010	Film	3300pF	±5%
C413	OA10601610	Elect	10µF	16V
C414	OA10601610	Elect	10µF	16V
C415	OF15392010	Film	3900pF	±5%
C416	OF15392010	Film	3900pF	±5%
C417	OA47701610	Elect	470µF	16V
C418	OA47701610	Elect	470µF	16V
C419	DK18103310	Ceramic	0.01µF	+80% -20%
C420	DK18103310	Ceramic	0.01µF	+80% -20%
CV01 } CV08	DK18103310	Ceramic	0.01µF	+80% -20%
PV01-RESISTORS				
R429	NF02470140	47Ω	±1%	¼W, Fuse
R430	NF02470140	47Ω	±1%	¼W, Fuse
PV01-SEMICONDUCTORS				
D401	HD60001160	C.R. Diode	E-452	
D402	HD60001160	C.R. Diode	E-452	
DV01	HD20022030	Diode	DSF10C	
DV02	HD20022030	Diode	DSF10C	
Q401 } Q404	HF203691B0	F.E.T.	2SK369(BL)	
Q405	HC10026090	IC	NJM2041DD	

REF. DESIG.	PART NO.	DESCRIPTION
<b>PV01-MISCELLANEOUS</b>		
J401	YP06003330	Plug, 3P
J402	YP06003330	Plug, 3P
J403	YT02020610	Terminal, 2P; RCA
JV01	YT02020260	Terminal, 2P; RCA
JV02	YT02060280	Terminal, 6P; RCA
JV03	YJ06002390	Jack, 5P
JV04	YJ06002430	Jack, 3P
JV05	YJ06002440	Jack, 4P
JV06	YJ06002450	Jack, 6P
JV07	YJ06002440	Jack, 4P
JV09	YJ06002450	Jack, 6P
JV10	YJ06002390	Jack, 5P
LV01	LY20240230	Relay, CD Direct
LV02	LY20240230	Relay, Phono Direct
SV01	SS04060020	Slide Switch
SV02	SS04060010	Slide Switch
W401	YB00370060	Connective Cord, 3P
W402	YB00370070	Connective Cord, 3P
WV01	YU06140260	Jumper Lead, 6P
WV02	YU06120260	Jumper Lead, 6P
WV04	YU05100260	Jumper Lead, 5P
<b>PW01-SPEAKER PROTECTOR RELAY CIRCUIT BOARD</b>		
PW01	YK175H1050 ZZ175H8050	P.W. Board, Speaker Protector Relay P.W. Board Assembly
<b>PW01-CAPACITORS</b>		
CW01	OF15224010	Film 0.22 $\mu$ F $\pm$ 5%
CW02	OF15224010	Film 0.22 $\mu$ F $\pm$ 5%
CW03	OF15224010	Film 0.22 $\mu$ F $\pm$ 5%
CW04	OF15224010	Film 0.22 $\mu$ F $\pm$ 5%
<b>PW01-RESISTORS</b>		
RW01	GG05022120	2.2 $\Omega$ $\pm$ 5% $\frac{1}{2}$ W
RW02	GG05022120	2.2 $\Omega$ $\pm$ 5% $\frac{1}{2}$ W
RW03	GA05100030	10 $\Omega$ $\pm$ 5% 3W
RW04	GA05100030	10 $\Omega$ $\pm$ 5% 3W
RW05	GA05331030	330 $\Omega$ $\pm$ 5% 3W
RW06	GA05331030	330 $\Omega$ $\pm$ 5% 3W
<b>PW01-SEMICONDUCTORS</b>		
DW01	HD20022030	Diode DSF10C
DW02	HD20022030	Diode DSF10C

REF. DESIG.	PART NO.	DESCRIPTION
<b>PW01-MISCELLANEOUS</b>		
JW01	YT01040360	Terminal, Speaker
JW02	YT01040370	Terminal, Speaker
JW03	YP06001040	Plug, 3P
JW04	YP06001040	Plug, 3P
JW13	YJ07001100	Jack, 5P
LW01	LJ311115080	Choke Coil
LW02	LJ311115080	Choke Coil
LW03	LY20240190	Relay, Speaker
LW04	LY20240190	Relay, Speaker
<b>PW51-SPEAKER SWITCH/PHONE CIRCUIT BOARD</b>		
PW51	YK176H3430 ZZ175H8430	P.W. Board, Speaker Switch/Phone P.W. Board Assembly
RW51	GA05122010	Resistor 1.2K $\Omega$ $\pm$ 5% 1W
RW52	GA05122010	Resistor 1.2K $\Omega$ $\pm$ 5% 1W
JW51	YJ01002340	Jack, Headphone
SW51	SP02020940	Push Switch, Speaker
WW51	YU02380260	Jumper Lead, 2P
WW52	YU05400260	Jumper Lead, 5P
<b>PY01-INPUT SELECTOR DISPLAY CIRCUIT BOARD</b>		
PY01	YK175H1030 ZZ175H8030	P.W. Board, Input Selector Display P.W. Board Assembly
DY01	H110028320	L.E.D. GL9HD4
DY07		
DY08	H110038030	L.E.D. SLP281F-50U
JS05	YJ06002440	Jack, 4P
JY01	YJ07001090	Jack, 4P
JY02	YJ06002440	Jack, 4P
JY03	YJ06002440	Jack, 4P
WY01	YU04400260	Jumper Lead, 4P
WY02	YU05180260	Jumper Lead, 5P

(W01-99)	Assembly and Wiring
(T01-99)	Adjustment
(X01-00)	Correction

#### NOTE ON SAFETY :

Symbol  $\triangle$  Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol  $\triangle$ . Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

## 9. TECHNICAL SPECIFICATIONS

(Model PM-54II)

### AUDIO SECTION

#### IHF Dynamic Power

4 OHMS	140 W
8 OHMS	100 W

#### POWER OUTPUT PER CHANNEL

DIN 4 OHMS	100 W
RMS 4 OHMS (20 Hz — 20 kHz)	70 W
DIN 8 OHMS AT 1 kHz	80 W
RMS 8 OHMS (20 Hz — 20 kHz)	60 W

TOTAL HARMONIC DISTORTION AT RMS 8 OHMS . . . . . 0.02 %

I.M. DISTORTION . . . . . 0.02 %

DAMPING FACTOR 8 OHMS (1 kHz) . . . . . 100

### MM CARTRIDGE INPUT

Frequency Response (IEC RIAA)	±0.5 dB
Signal-to-Noise Ratio (IEC A weighted)	86 dB
Input Impedance	47 k ohms
Input Capacitance	200 pF
Input Sensitivity	2.5 mV
Equivalent Input Noise	0.25 µV
Dynamic Range	113 dB

### MC CARTRIDGE INPUT

Input Sensitivity	250 µV
Input Impedance	100 ohms

### CD-TUNER-TAPE INPUT

Input Impedance	20 k ohms
Input Sensitivity	150 mV
Frequency Response +0, -1 dB	10 Hz ~ 70 kHz
Signal to Noise Ratio (IEC A weighted)	96 dB

### OUTPUT VOLTAGE

Tape Out [PHONO (MM) 7.75 mV]	465 mV
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### OUTPUT IMPEDANCE

Tape Out	220 ohms
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### GENERAL

Power Requirements	N and T versions	220/240 V AC, 50/60 Hz
	E version	110/120/220/240 V AC, 50/60 Hz
Power Consumption at Rated Output, both Channels Operating		250 W
Dimensions		
Panel Width		416 mm
Panel Height		118 mm
Depth		334 mm
Weight		
Unit Alone		9.5 kg

(Model PM-64II)

## AUDIO SECTION

### IHF Dynamic Power

4 OHMS .....	225 W
8 OHMS .....	146 W

### POWER OUTPUT PER CHANNEL

DIN 4 OHMS .....	160 W
RMS 4 OHMS (20 Hz — 20 kHz) .....	105 W
DIN 8 OHMS AT 1 kHz .....	115 W
RMS 8 OHMS (20 Hz — 20 kHz) .....	100 W

TOTAL HARMONIC DISTORTION AT RMS 8 OHMS .....

I.M. DISTORTION .....

DAMPING FACTOR 8 OHMS (1 kHz) .....

## MM CARTRIDGE INPUT

Frequency Response (IEC RIAA) .....	±0.5 dB
Signal-to-Noise Ratio (IEC A weighted) .....	86 dB
Input Impedance .....	47 k ohms
Input Capacitance .....	200 pF
Input Sensitivity .....	2.5 mV
Equivalent Input Noise .....	0.25 $\mu$ V
Dynamic Range .....	113 dB

## MC CARTRIDGE INPUT

Input Sensitivity .....	250 $\mu$ V
Input Impedance .....	100 ohms

## CD-TUNER-TAPE INPUT

Input Impedance .....	20 k ohms
Input Sensitivity .....	150 mV
Frequency Response +0, -1 dB .....	10 Hz ~ 70 kHz
Signal to Noise Ratio (IEC A weighted) .....	96 dB

## OUTPUT VOLTAGE

Tape Out [PHONO (MM) 7.75 mV] .....	465 mV
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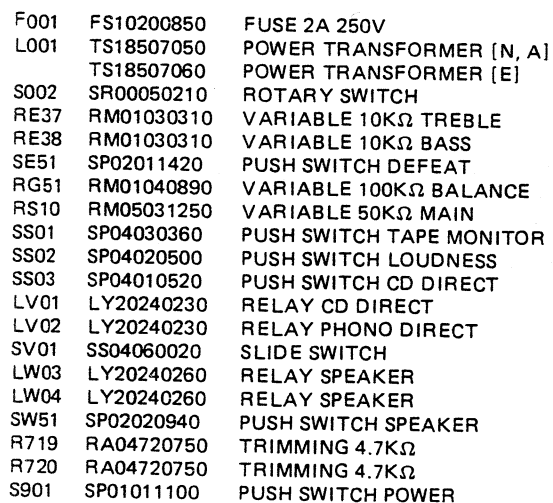
## OUTPUT IMPEDANCE

Tape Out .....	220 ohms
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## GENERAL

Power Requirements	N and T versions .....	220/240 V AC, 50/60 Hz
	E version .....	110/120/220/240 V AC, 50/60 Hz
Power Consumption at Rated Output, both Channels Operating .....		380 W
Dimensions		
Panel Width .....		416 mm
Panel Height .....		146 mm
Depth .....		334 mm
Weight		
Unit Alone .....		12.5 kg

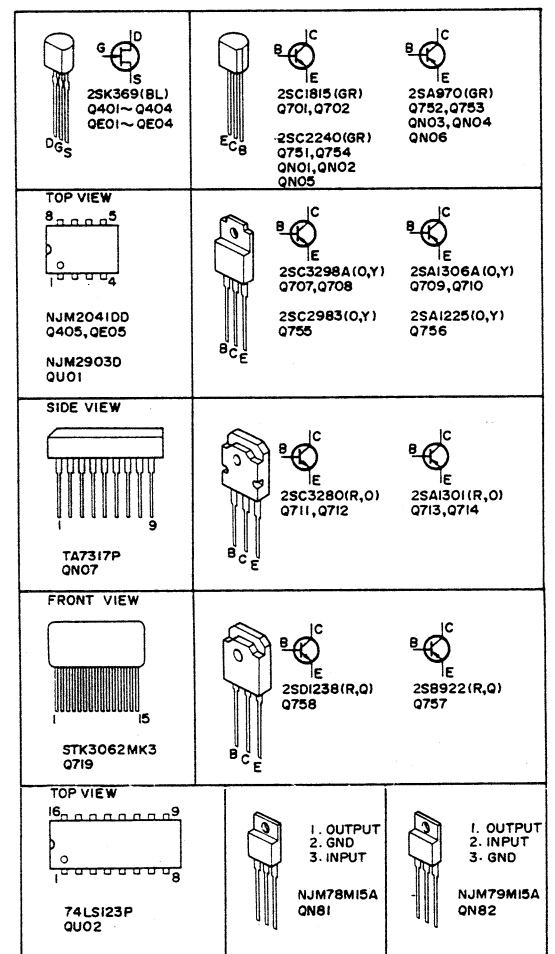
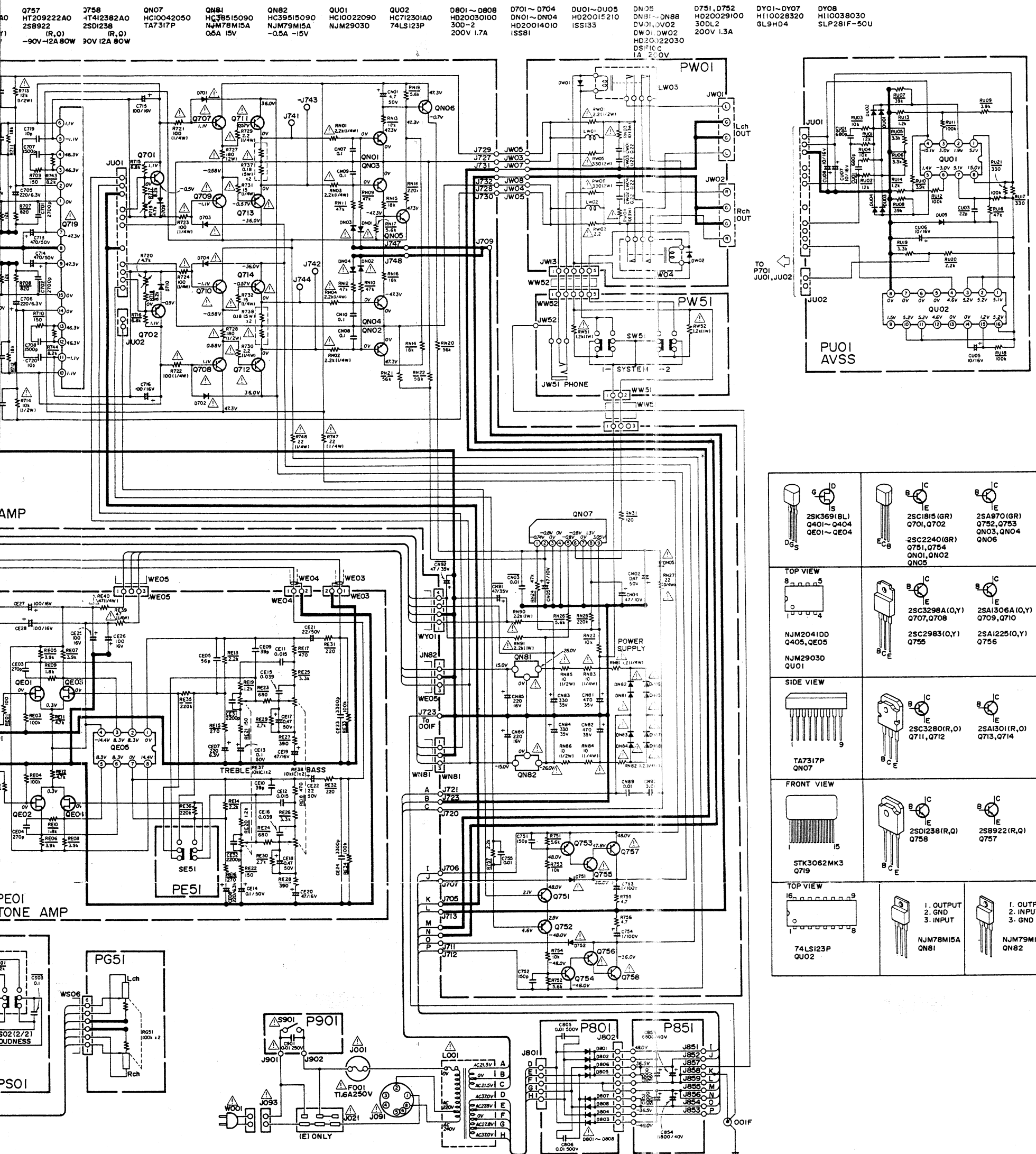
Q401-Q404	Q405,QE05	Q701,Q702	Q707,Q708	Q709,Q710	Q711,Q712	Q713,Q714	3719	Q751,Q754	Q752,Q753	Q755	Q756	Q757	Q758	Q807	Q808
HF01-QE04	HC10026090	HT318151C0	HT332982C0	HT113062D0	HT332802A0	HT113012A0	HC10204030	Q801,Q802	Q803,Q804	HT329832A0	HT112252A0	HT209222A0	HT412382A0	HC10042050	HC38515050
Q203691A0	NJM2041DD	25C1815	25C3298A	25A1306A	25C3306A	25A1301A	STK3062MK3	Q805	Q806	25C2983	25A1225	25B922	25D1238	TA7317P	HC38515050
25K369			(Q,I)	(Q,I)	(R,O)	(R,O)		HT322401A0	HT109701A0	(Q,I)	(Q,I)	(R,O)	(R,O)		HC38515050
(BL)		(GR)	180V 1.5A 25W	-180V -1.5A 25W	160V 12A 120W	-160V -12A 120W		25C2240A0	25A970A0	160V 15W	-160V 15W	-90V -12A 90W	30V 12A 90W		Q6A 15V



**Symbol  $\triangle$  Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol  $\triangle$ . Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard**

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# Model PM-54II



"SERVICE INFORMATION IS FOR USE BY QUALIFIED PERSONNEL ONLY - ANY MISADJUSTMENT OR MISALIGNMENT MAY BE TREATED AS A NON-WARRANTY REPAIR BY ANY MARANTZ SERVICE CENTRE -"

## Kind of Common Parts

- RESISTOR**
- R\*\*\* (1) GD05 --- 140, Carbon film fixed resistor,  $\pm 5\%$  1/4W
  - R\*\*\* (2) GD05 --- 160, Carbon film fixed resistor,  $\pm 5\%$  1/6W
- CERAMIC CAP.**
- DD1 --- 370, Ceramic condenser, disc type (titan condenser) Temp. coeff. P350 ~ N1000 50V
- CERAMIC CAP.**
- DK16 --- 300, High dielectric constant ceramic condenser, disc type (titan variable) Temp. chara. 2B4 50V

- ELECTROLY CAP. (E) / FILM CAP. (F)**
- EA --- 10, Electrolytic condenser, one-way lead type, tolerance  $\pm 20\%$
  - DF15 --- 350, Plastic film condenser, one-way type, Mylar,  $\pm 5\%$  50V

\* In case of ordering the common parts, please establish the correct parts number of 10 figures by the procedure "ASSIGNMENT OF COMMON PARTS CODES"